The University is committed to equal access to programs, facilities, admission and employment for all persons. It is the policy of the University to maintain an environment free of harassment and free of discrimination against any person because of age, race, color, ancestry, national origin, religion, creed, service in the uniformed services (as defined in state and federal law), veteran status, sex, sexual orientation, marital or family status, pregnancy, pregnancy-related conditions, physical or mental disability, gender, perceived gender, gender identity, genetic information or political ideas. Discriminatory conduct and harassment, as well as sexual misconduct and relationship violence, violates the dignity of individuals, impedes the realization of the University’s educational mission, and will not be tolerated. Direct all inquiries regarding the nondiscrimination policy to Dr. Kenneth Lehrman III, Vice Provost for Affirmative Action, Affirmative Action Office, The Pennsylvania State University, 328 Boucke Building, University Park, PA 16802-5901, Email: kfl2@psu.edu, Tel (814) 863-0471. U.Ed. EMS 15–64
Message from the Dean

Welcome to the College of Earth and Mineral Sciences at Penn State! By studying materials, energy, the environment, natural resources, weather, climate, people, and places, our students are able to make a difference in the lives of people throughout the world. You are joining a remarkable community of faculty, staff, and students who are excited to help you develop the skills and experience needed to pursue your career goals.

Take advantage of all the resources available to you, both within the College of Earth and Mineral Sciences and at Penn State. The Ryan Family Student Center, 14 Deike Building, houses an incredible staff of tutors and advisers who are an invaluable resource to help you foster a successful Penn State experience. Many EMS students call the Ryan Family Student Center a “home away from home,” as it provides a welcoming atmosphere where students can gather to study, relax, and socialize, in addition to utilizing the many services provided.

Beyond course work, I encourage you to pursue a well-rounded experience. Branch out and find a student organization that shares your interests, whether that’s joining the EMS Student Council, participating in THON, or connecting with peers with similar interests. There are thousands of organizations on campus. Our alumni always reflect on the tremendous difference that those connections — with peers, staff, and faculty — made in their careers.

College is a time of extraordinary freedom and a time of new social experiences and challenges in the midst of the academic challenges. We want to help you exceed your academic objectives, to enjoy both the rich experience of social life at this university while achieving the knowledge you need for your future career.

Enjoy, succeed, and take advantage of all our College has to offer!

William E. Easterling
Dean, College of Earth and Mineral Sciences

Academic Calendars

SUMMER 2016 Academic Calendar

<table>
<thead>
<tr>
<th>Description</th>
<th>Maymester</th>
<th>1st Six-Week Session</th>
<th>2nd Six-Week Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival Day - New Students</td>
<td>Sun, May 8</td>
<td>Sun, May 15</td>
<td>Sun, June 26</td>
</tr>
<tr>
<td>Registration - Deadline</td>
<td>Sun, May 8</td>
<td>Sun, May 15</td>
<td>Tues, June 28</td>
</tr>
<tr>
<td>Intent to Graduate - Activation Period</td>
<td>Mon - Fri, May 9 - June 17</td>
<td>Mon - Fri, May 9 - June 17</td>
<td>Mon - Fri, May 9 - June 17</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>Mon, May 9</td>
<td>Mon, May 16</td>
<td>Wed, June 29</td>
</tr>
<tr>
<td>Independence Holiday - No Classes</td>
<td>------</td>
<td>--</td>
<td>Mon, July 4</td>
</tr>
<tr>
<td>Regular Drop - Deadline</td>
<td>Wed, May 11</td>
<td>Thurs, May 19</td>
<td>Tues, July 5</td>
</tr>
<tr>
<td>Regular Add - Deadline</td>
<td>Thurs, 8:00 a.m. (ET) May 12</td>
<td>Fri, 8:00 a.m. (ET) May 20</td>
<td>Wed, 8:00 a.m. (ET) July 6&gt;</td>
</tr>
<tr>
<td>Late Drop Begins</td>
<td>Thurs, May 12</td>
<td>Fri, May 20</td>
<td>Wed, July 6</td>
</tr>
<tr>
<td>Late Registration Begins</td>
<td>Fri, May 13</td>
<td>Sat, May 21</td>
<td>Thurs, July 7</td>
</tr>
<tr>
<td>Memorial Day Holiday - No Classes</td>
<td>Mon, May 30</td>
<td>Mon, May 30</td>
<td>------</td>
</tr>
<tr>
<td>Late Drop - Deadline</td>
<td>Tues, May 31</td>
<td>Thurs, June 16</td>
<td>Tues, August 2</td>
</tr>
<tr>
<td>Declare Minor - Deadline (Graduating Students)</td>
<td>------</td>
<td>--</td>
<td>Tues, August 2</td>
</tr>
<tr>
<td>Withdrawal - Deadline</td>
<td>Mon, June 6</td>
<td>Fri, June 24</td>
<td>Wed, August 10</td>
</tr>
<tr>
<td>Classes End</td>
<td>Mon, June 6</td>
<td>Fri, June 24</td>
<td>Wed, August 10</td>
</tr>
<tr>
<td>Study Days</td>
<td>Tues, June 7&gt;</td>
<td>Sat - Sun, June 25 - 26</td>
<td>Thurs, August 11</td>
</tr>
<tr>
<td>Final Exams</td>
<td>Wed, June 8</td>
<td>Mon, June 27</td>
<td>Fri, August 12</td>
</tr>
<tr>
<td>Commencement</td>
<td>Sat, August 13</td>
<td>Sat, August 13</td>
<td>Sat, August 13</td>
</tr>
</tbody>
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## SPRING 2016 Academic Calendar

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intent to Graduate - <strong>Activation Period</strong></td>
<td>Saturday - Monday, January 2 - 25</td>
</tr>
<tr>
<td>Leave of Absence - <strong>Deadline</strong></td>
<td>Friday, January 8</td>
</tr>
<tr>
<td>Arrival Day - <strong>New Students</strong></td>
<td>Saturday, January 9</td>
</tr>
<tr>
<td>Student Registration - <strong>Deadline</strong></td>
<td>Sunday, January 10</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>Monday, January 11</td>
</tr>
<tr>
<td>Martin Luther King Day - <strong>No Classes</strong></td>
<td>Monday, January 18</td>
</tr>
<tr>
<td>Regular Drop - <strong>Deadline</strong></td>
<td>Wednesday, January 20</td>
</tr>
<tr>
<td>Regular Add - <strong>Deadline</strong></td>
<td>Thursday, 8:00 a.m. (ET), January 21</td>
</tr>
<tr>
<td>Late Drop Begins</td>
<td>Thursday, January 21</td>
</tr>
<tr>
<td>Late Registration Begins</td>
<td>Friday, January 22</td>
</tr>
<tr>
<td>Final Exam Conflict - <strong>Filing Period</strong></td>
<td>Monday - Sunday, February 15 - March 6</td>
</tr>
<tr>
<td>Spring Break - <strong>No Classes</strong></td>
<td>Sunday - Saturday, March 6 - 12</td>
</tr>
<tr>
<td>Late Drop - <strong>Deadline</strong></td>
<td>Friday, April 8</td>
</tr>
<tr>
<td>Declare Minor - <strong>Deadline</strong></td>
<td>Friday, April 8</td>
</tr>
<tr>
<td>Withdrawal - <strong>Deadline</strong></td>
<td>Friday, April 29</td>
</tr>
<tr>
<td>Classes End</td>
<td>Friday, April 29</td>
</tr>
<tr>
<td>Study Days</td>
<td>Saturday - Sunday, April 30 - May 1</td>
</tr>
<tr>
<td>Final Exams</td>
<td>Monday - Friday, May 2 - 6</td>
</tr>
<tr>
<td>Commencement</td>
<td>Friday - Sunday, May 6 - 8</td>
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<td>Geography</td>
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<tr>
<td>Geosciences</td>
<td>20</td>
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<tr>
<td>Materials Science &amp; Engineering</td>
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Earth and Mineral Sciences Academy for Global Experiences (EMSAGE)

What is EMSAGE?
The Earth and Mineral Sciences Academy of Global Experience (EMSAGE) is an engaged scholarship program. Notable distinction is obtained through demonstration of high achievement in the following areas:
- Scholarship
- Experiential Learning
- Global Literacy
- Service

What are the Benefits of Graduating as an EMSAGE Laureate?
Students pursue activities and have accomplishments that demonstrate breadth and depth in the areas of:
- Global Awareness
- Professional and Civic Service
- Leadership

Additional benefits include:
- Enhanced résumé
- Competitive edge in the global economy
- Formal recognition at commencement
- Crystal Laureate memento and certificate
- Name enshrined on the EMSAGE Laureate roster in the Ryan Family Student Center

How do I Become an EMSAGE Laureate?
Students are encouraged to actively plan their academic and professional development. Set goals that are consistent with your interests, and develop a plan to achieve them! Seek input from your faculty mentors and advisors. Keep a portfolio of your activities and accomplishments.
- Must apply in your graduation semester (or in spring, for summer graduates)
- Must have a minimum cumulative grade point average of 3.0 to apply

Want to learn more? Visit www.ems.psu.edu/EMSAGE for additional information and attend the EMSAGE information sessions held each semester.

Academic Calendars

FALL 2015 Academic Calendar

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intent to Graduate - Activation Period</td>
<td>Monday - Tuesday</td>
</tr>
<tr>
<td></td>
<td>August 17 - September 8</td>
</tr>
<tr>
<td>Leave of Absence - Deadline</td>
<td>Friday</td>
</tr>
<tr>
<td></td>
<td>August 21</td>
</tr>
<tr>
<td>Arrival Day - New Students</td>
<td>Friday - Saturday</td>
</tr>
<tr>
<td></td>
<td>August 21 - 22</td>
</tr>
<tr>
<td>Arrival Day - Returning Students</td>
<td>Saturday - Sunday</td>
</tr>
<tr>
<td></td>
<td>August 22 - 23</td>
</tr>
<tr>
<td>Student Registration - Deadline</td>
<td>Sunday</td>
</tr>
<tr>
<td></td>
<td>August 23</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>Monday</td>
</tr>
<tr>
<td></td>
<td>August 24</td>
</tr>
<tr>
<td>Regular Drop - Deadline</td>
<td>Wednesday</td>
</tr>
<tr>
<td></td>
<td>September 2</td>
</tr>
<tr>
<td>Regular Add - Deadline</td>
<td>Thursday</td>
</tr>
<tr>
<td></td>
<td>8:00 a.m. (ET)</td>
</tr>
<tr>
<td></td>
<td>September 3</td>
</tr>
<tr>
<td>Late Drop Begins</td>
<td>Thursday</td>
</tr>
<tr>
<td></td>
<td>September 3</td>
</tr>
<tr>
<td>Late Registration Begins</td>
<td>Friday</td>
</tr>
<tr>
<td></td>
<td>September 4</td>
</tr>
<tr>
<td>Labor Day Holiday - No Classes</td>
<td>Monday</td>
</tr>
<tr>
<td></td>
<td>September 7</td>
</tr>
<tr>
<td>Final Exam Conflict - Filing Period</td>
<td>Monday - Sunday</td>
</tr>
<tr>
<td></td>
<td>September 28 - October 18</td>
</tr>
<tr>
<td>Late Drop - Deadline</td>
<td>Friday</td>
</tr>
<tr>
<td></td>
<td>November 13</td>
</tr>
<tr>
<td>Declare Minor - Deadline (Graduating Students)</td>
<td>Friday</td>
</tr>
<tr>
<td></td>
<td>November 13</td>
</tr>
<tr>
<td>Thanksgiving Holiday - No Classes</td>
<td>Sunday - Saturday</td>
</tr>
<tr>
<td></td>
<td>November 22 - 28</td>
</tr>
<tr>
<td>Withdrawal - Deadline</td>
<td>Friday</td>
</tr>
<tr>
<td></td>
<td>December 11</td>
</tr>
<tr>
<td>Classes End</td>
<td>Friday</td>
</tr>
<tr>
<td></td>
<td>December 11</td>
</tr>
<tr>
<td>Study Days</td>
<td>Saturday - Sunday</td>
</tr>
<tr>
<td></td>
<td>December 12 - 13</td>
</tr>
<tr>
<td>Final Exams</td>
<td>Monday - Friday</td>
</tr>
<tr>
<td></td>
<td>December 14 - 18</td>
</tr>
<tr>
<td>Commencement</td>
<td>Saturday</td>
</tr>
<tr>
<td></td>
<td>December 19</td>
</tr>
</tbody>
</table>
Safety & Community Resources

Your health and safety in the College of Earth and Mineral Sciences and within the University is our principal concern. You can access safety policies and College safety contacts: [http://www.ems.psu.edu/faculty_staff/safety](http://www.ems.psu.edu/faculty_staff/safety).

Should you become aware of any hazard, please notify the safety officer below:

**Rhonda Stoner** - College Safety Officer  
248 Deike Building  
814-865-5709  
rgs8@psu.edu

**Safety Contact Information:**

<table>
<thead>
<tr>
<th>Department</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire &amp; Accident</td>
<td>911</td>
</tr>
<tr>
<td>Police Services</td>
<td>814-863-1111</td>
</tr>
<tr>
<td>Hazardous Material Release</td>
<td>814-865-6391</td>
</tr>
<tr>
<td>Environmental Health and Safety</td>
<td>814-865-6391</td>
</tr>
<tr>
<td>Physical Plant Service Desk</td>
<td>814-865-4731</td>
</tr>
</tbody>
</table>

**Additional Resources:**

- [Compliance & Ethics Hotline](https://www.psu.edu/compliance-ethics) 800-560-1637  
- Pennsylvania State Police 814-470-2238  
- [Childline](https://www.childline.org) 800-932-0313  
- [Centre County Women’s Resource Center](https://www.centrecounty.com/womens-resource-center) 877-234-5050  
- [National Domestic Violence Hotline](https://www.thehotline.org) 800-799-7233  
- [National Sexual Assault Hotline (RAINN)](https://www.rainn.org) 800-656-6473

**Transportation:**

- Fullington Trailways (Local office) 814-238-1100  
- Greyhound Transit Line (Local office) 814-238-7971  
- CATA Local Buses 814-238-2282  
- Centre County Taxi for Less 814-238-7900  
- AA Transit Inc. (Taxi) 814-231-8294  
- Nittany Express Inc. (Taxi) 814-867-4647  
- Handy Delivery Taxi 814-353-6001

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**Academic Integrity**

**Academic Integrity—A Big Deal with Big Consequences**

[http://www.ems.psu.edu/current_undergrad_students/academics/integrity_policy](http://www.ems.psu.edu/current_undergrad_students/academics/integrity_policy)

Honesty in the pursuit of scholarly activities is not only right; it is part of Penn State’s Student Code of Conduct, and violations come with serious consequences. The College of EMS robustly addresses issues of academic dishonesty, which is any act of falsification, misrepresentation, or deception in course work. Course instructors provide a strong statement about academic integrity in every syllabus, and they mean it.

If a student is suspected of dishonesty, the course instructor or TA will confront the student with the evidence and provide an Academic Integrity form for the student’s signature. This form will outline the nature of the allegation and the corresponding sanction, which could range anywhere from a zero for the test or assignment to an “F” for the course. The student has the right to contest or accept. If the student is found responsible, the sanction is applied and a record is created with the Office of Student Conduct. This is an upsetting situation that is so easily avoided. Be ethical. Be honest. Do your own work. Don’t plagiarize…anything! If it feels wrong, it probably is. If you are unsure about how to avoid plagiarizing, ask your instructor. If your habit is always to be honest, be comforted that the stringent rules in place are created in part to protect your hard work and integrity.

Visit the website at the link above to learn everything there is to know about Academic Integrity in EMS—the extensive list of suggested sanctions for various offenses; Penn State’s official policy; and how we go about hearing cases of contested violations.
EMS Undergraduate Contacts

Ryan Family Student Center
14 Deike Building
814-863-2751 or 814-865-7482
http://www.ems.psu.edu/student_center

Associate Dean for Education
H. Nels Shirer
hns@psu.edu

Assistant to the Associate Dean
Martha Traverse
mjt5@psu.edu
814-863-4024
Suite 14G

Administrative Coordinator
Linda Spangler
spangler@ems.psu.edu
814-865-5517
Suite 14H

Director of Academic Advising
Hilleary Himes
hxs220@psu.edu

Recruiter/Academic Adviser
Stacy Davidson
sjp123@psu.edu

Academic Adviser
Sylvia Deng
xod5003@psu.edu

Administrative Coordinator
Danielle Palmer
dmp35@psu.edu
814-863-2751
Front Desk

Giles Writer-in-Residence,
Communications Resource
Del Bright
kdb9@psu.edu
814-863-6077
Suite 14F

Mathematics Instructor
C. James Kelly
cjk133@psu.edu
814-865-6350
Suite 14E

Information Technology Tutor
Tim Robinson
robinson@ems.psu.edu
814-863-9691
Suite 14A

University Resources

Office of Student Aid:
http://www.psu.edu/studentaid
814-865-6301

Office of the Bursar:
http://www.bursar.psu.edu/
814-865-6528

Office of the Registrar:
http://www.registrar.psu.edu/
814-865-6357

Housing Assignment Office:
www.eLiving@psu.edu
814-865-7501

Undergraduate Admissions Office:
http://admissions.psu.edu/
814-865-5471

University Health Services:
http://studentaffairs.psu.edu/health/
Student Health Center
814-863-0774

Counseling and Psychological Services (CAPS):
http://studentaffairs.psu.edu/counseling/
501 Student Health Center
814-863-0395

Center for Spiritual & Ethical Development:
http://studentaffairs.psu.edu/spiritual/
Pasquerilla Spiritual Center
814-865-6548

LGBTQA Resource Center:
www.studentaffairs.psu.edu/lgbtqa
101 Boucke Building
814-863-1248

Sign-up for PSUAlert:

Penn State encourages students, faculty and staff to enroll in PSUAlert, an easy and accessible system that notifies users via cell phone when classes are canceled due to weather conditions or if the campus has an emergency situation. Penn State uses this system to send text message alerts directly to your cell phone and/or e-mail account.

To register, visit https://psualert.psu.edu/psualert/ and follow the instructions to sign up!
EMS College Minors

Please visit this website to learn more about the following minors: http://www.ems.psu.edu/prospective_undergrad_students/degree_programs

- Astrobiology (ABIOL) (Intercollege Program)
- Climatology (CLIMA)
- Earth Systems (EASY)
- Electrochemical Engineering (ELCHE)
- Electronic and Photonic Materials (E P M)
- Energy Business and Finance (EBF)
- Energy Engineering (ENENG)
- Environmental Inquiry (ENV I) (Intercollege Program)
- Environmental Systems Engineering (ENVSE)
- Geographic Information Science (GIS)
- Geography (GEOG)
- Geophysics (GPHYS)
- Geosciences (GEOSC)
- Information Science and Technology - for EMS (ISEMS)
- Meteorology (METEO)
- Mining Engineering (MNG E)
- Petroleum and Natural Gas (PNG E)
- Polymer Science (PLMSC)
- Watersheds and Water Resource (WWR)

EMS Undergraduate Contacts

Fletcher Byrom EMS Library
105 Deike Building
814-865-9517
http://www.libraries.psu.edu/psul/emsl.html

Librarian Linda Musser lrn4@psu.edu
814-863-7073

Hours: Monday - Thursday: 7:45 a.m. - 11:00 p.m.
Friday: 7:45 a.m. - 7:00 p.m.
Saturday: 1 p.m. - 7:00 p.m.
Sunday: 1 p.m. - 11:00 p.m.

Email Contact: UL-EMS@lists.psu.edu
Twitter: @EMSLibraryPSU
Facebook: EMSLibrary@PennState

Study Rooms available by reservation:
https://reservations.psu.edu/virtualems/
Details: https://www.libraries.psu.edu/psul/infosvcs/group_study.html

EMS Museum and Art Gallery
6 & 18 Deike Building
http://www.ems.psu.edu/outreach/museum/

Museum Director Russell Graham rwg12@psu.edu
museum@ems.psu.edu
207 Deike Building 814-865-6336

Assistant Director Julie Snider jxs1030@psu.edu
111 Spc. Svgs. Bldg. 814-571-6317

Hours: Monday - Friday: 8:00 a.m. - 5:00 p.m.
Academic Advising is an opportunity for you to engage with faculty and staff in the College of Earth and Mineral Sciences to identify academic goals, develop educational plans, and maximize your educational experience. We encourage students to take advantage of a wide array of learning opportunities including: study abroad, world languages, minors, and engaged scholarship.

It is the responsibility of all students to initiate contact with academic advisers, monitor their academic progress, and follow university policies.

**Assigned Adviser**
Your primary academic adviser is a faculty or staff member in your intended major. You can find your assigned adviser’s contact information on eLion (http://www.elion.psu.edu) under the Advising menu and Adviser Information. Your assigned adviser is your best source of information regarding your major and course schedule planning.

**Ryan Family Student Center Advisers**
Ryan Family Student Center (14 Deike) advisers are available to answer questions regarding general education courses, exploring university programs and resources, and understanding academic policies.

**Entering a Major**
All first-year students and some advanced standing students are not officially enrolled in a major. Instead you are enrolled in EM SC, the College’s pre-major status. Pre-major status is appropriate to explore majors and meet entrance-to-major requirements, as required by the degree.

Entry to the major of your choice can occur in many majors as soon as you have earned a 2.0 GPA and third semester standing. However, some majors have more stringent requirements which may include a cumulative GPA and the successful completion of required coursework. Please work closely with your adviser to complete the necessary requirements for your major. http://advising.psu.edu/entrance-major-requirements-college-earth-and-mineral-sciences

**Recommended Academic Plans:** Recommended semester by semester plans are available for each major. http://www.ems.psu.edu/current_undergrad_students/academics/course_scheduling/UP

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**EMS Student Organizations**

**EMS Student Organizations (Continued)**

**Materials Science and Engineering**
http://www.matse.psu.edu/undergraduate/student-organizations

- Material Advantage
- Keramos
- MATSE Lion Scouts

**Meteorology**
http://www.met.psu.edu/academics/undergraduate-studies/organizations-and-clubs

- Campus Weather Service
- Chi Epsilon Pi Honor Society
- Penn State Emergency Management Club
- PSUBAMS
- Severe Weather Interest Group (SWIG)
- Storm Chase Team (PSU Chase)
- Supportive network for Women in Meteorology (SWIM)
- Weather Risk Club
EMS Student Organizations

EMS Student Council
http://www.ems.psu.edu/current_undergrad_students/student_council

Adviser: Linda Spangler
spangler@ems.psu.edu
14 Deike Building
814-863-5517

EMS Interest House (Irvin Hall)
http://www.irvin.psu.edu

Adviser: Bill Syrett
wjs1@psu.edu
606C Walker Building
814-865-6172

Energy and Mineral Engineering
http://www.eme.psu.edu/academics/student-orgs

- American Association of Drilling Engineers Penn State Student Chapter
- American Solar Energy Society - Penn State Chapter
- Energy Business and Finance Society
- Energy Land Management Society
- Society of Energy Engineers
- Society of Environmental Systems Engineers
- International Society of Explosives Engineers Student Chapter
- Society of Mining Engineers
- Society of Petroleum Engineers

Geography
http://www.geog.psu.edu/about-us/groups-and-organizations

- Undergraduate Department of Geography Students (UnderDoGS)
- Gamma Theta Upsilon (GTU)
- Supporting Women In Geography (SWIG)
- GIS Coalition

Geosciences
http://www.geosc.psu.edu/student-life

- Penn State Geological Sciences Club

Ryan Family Student Center Services

Advising (Continued)

Course Substitutions
Once you have declared your EMS major, all exceptions to degree requirements (as stated on the Recommended Academic Plan for your major) require completion of an EMS Request for Exception to Program Requirements Form (available in your department office or in the Ryan Family Student Center, 14 Deike). Such exceptions include course substitutions, course waivers, and exceptions to General Education requirements.

- For substitutions in your major, you must work closely with your assigned adviser.
- Information on General Education substitutions is available at: http://handbook.psu.edu/content/general-education#flexibility

Add a Minor:
Many EMS students choose to augment their degree program with an accompanying area of expertise, called a minor. A minor may consist of course work in a single area or from several disciplines. In most cases, students do not have to be enrolled in the college that offers a particular minor in order to pursue that minor. Minors require at least 18 credits. EMS offers several disciplinary and interdisciplinary minors to complement almost any degree program. If you’re interested in a minor that is offered outside of EMS, please contact an academic adviser to discuss your goal. http://handbook.psu.edu/content/minors (EMS Minors listed on page 23.)

Additional Academic Advising Resources:
Academic Advising Portal: The Academic Advising Portal contains information about academic life at Penn State. You’ll find the academic calendar, information on Faculty Senate policies, and information on colleges, majors, and, minors. http://www.advising.psu.edu

Degree Audit: The degree audit indicates how the courses you are taking and those you have completed fit the requirements for your major. In eLion, select Degree Audit, then select either “Current” if you are enrolled in a major or “Intended” if you are pre-major (EMSC) from the degree audit menu. If intended, select the College of Earth and Mineral Sciences and your intended major from the drop-down list. Prepare for advising appointments by bringing a printed copy of your degree audit. http://www.eLion.psu.edu
Writing Tutoring

Recognizing the need for effective writing in the sciences and engineering, the College of Earth and Mineral Sciences provides free tutoring and instruction on writing to undergraduate students for help with anything from your paper assignments to your résumé and personal essays.

I can help you best if you understand my role and recognize your own responsibilities as a writer. A tutor’s task is not to edit or rewrite your papers for you, but to help you understand and employ effective writing principles. It is your responsibility in a tutorial session to prompt me by articulating your key questions and writing challenges. Be prepared to take an active role in discovering how to improve your writing. The process of learning to write more effectively is as important as the product.

Students are encouraged to make a Writing Tutoring appointment via e-mail to guarantee a time-spot. Please be courteous to others and e-mail or call promptly to cancel your appointment if you are unable to attend your arranged time in order to allow another student to schedule during that time.

To get the most out of your tutoring session:
- Plan ahead. Writing well takes time.
- Bring the assignment sheet to the tutoring session.
- Come prepared. Have specific questions.

Visit Del’s blog to access writing tips and find helpful online writing resources: http://www.personal.psu.edu/kdb9/bogs/giles_writer-in-residence/

Contact information:
Del Bright, Giles Writer-in-Residence
14F Deike Building
kdb9@psu.edu
814-863-6077
Contact Information

Department Head: Dr. Susan Sinnott  
sbs5563@psu.edu  
814-865-2262

Administrative Coordinator: Katina Bartley-Posney  
katina@matse.psu.edu  
814-865-0497

Associate Head for Undergraduate Studies: Dr. R. Allen Kimel  
kimel@matse.psu.edu  
814-865-5397

Academic Adviser: Meg Abplanalp  
mba12@psu.edu  
814-865-5765

Records Specialist: Cindy Lake  
lake@matse.psu.edu  
814-865-5766

Major

http://www.matse.psu.edu/studentservices/ug

Materials Science and Engineering (MATSE)

Computer Facility

Contact Person: Scott Henninger  
henninger@matse.psu.edu  
814-865-3568

Location / Hours: 114 Deike Building, During library hours via card access

Ryan Family Student Center Services

Mathematics and Physics Tutoring

Mathematics tutors are available:
Monday-Thursday evenings
5:30pm-8:00pm in the Ryan Family Student Center (14 Deike)
- All EMS math tutors can support Math 022, 026, 041, 140 and 141.
- Some EMS math tutors will support Math 230, 231, and 251.
A detailed schedule of the EMS math tutor shifts will be posted in the Ryan Family Student Center at the beginning of each semester.

Supplemental help in physics is available:
Monday and Tuesday evenings
7:00pm in the Ryan Family Student Center (14 Deike)
Supported courses include PHYS 211, 212, 213, 250 and 251.
*Please arrive by 7pm if you are seeking physics help!

Contact Information:
James Kelly  
14E Deike Building  
cjk133@psu.edu  
814-865-6350

Information Technology Tutoring

Our resident technology instructor provides IT assistance to support students’ educational objectives including assistance in web page development, presentation software, and multi-media development. Our College has a cutting-edge Media Commons lab including a One-Button Studio to support students creating video and audio projects, located in 20 Hosler Building. Free printing is also available for EMS students in the RFSC Computer Lab.

Contact information:
Tim Robinson  
14A Deike Building  
tar5@psu.edu  
814-863-9691
Faculty Senate Petitions
http://www.EMS.psu.edu/prospective_undergrad_students/financial_aid/sources

The two most common Senate petitions are:
1. Retroactive Withdrawal for a past semester (or semesters).
2. Retroactive Late-Drop of a course (or courses) from a past semester.

To apply to these petitions, the excuse must include extenuating circumstances outside of your control. You will not be granted petition approvals simply due to poor academic performance, the condition of your GPA, or because you “don’t need” the course or courses to graduate. Losing financial aid due to being dropped from degree status is not a qualifying excuse, in and of itself. However, financial worries or burdens that were present before the drop action may be.

Please contact Martha Traverse in the RFSC for all Senate petition questions and submissions. **DO NOT** contact the Faculty Senate directly.

Contact Information:
Martha Traverse
14G Deike Building
mjt5@psu.edu
814-863-4024

EMS Listservs

Stay informed! Please check your PSU e-mail often (or forward it to your preferred email account) as you will be added to the college-wide/departmental (if applicable) undergraduate e-mail listserv(s). Information will be sent to your Penn State e-mail account regularly to help you stay informed of College events, activities, scholarships, and more!

Department Contact Information

Geosciences
508 Deike Building
814-865-7791
http://www.geosc.psu.edu

Contact Information

Department Head
Dr. Lee Kump
503 Deike Building
lkump@psu.edu
814-863-1274

Associate Department Head for Undergraduate Programs
Dr. Peter Heaney
540 Deike Building
pjh14@psu.edu
814-865-6821

Undergraduate Programs Staff
Nicole Stocks
542 Deike Building
nms13@psu.edu
814-865-7791

Majors
http://www.geosc.psu.edu/undergraduates

Geosciences B.A. (GSCBA)

Geosciences B.S. (GSCBS)
Options: General (GEN) Hydrogeology (HYDRO)

Geobiology (GEOBI)

Earth Sciences (EARTH)

Earth Science and Policy (EARSP)
Options: Climate Change (CLCHG) Energy (ENRGY) General (GEN) Water and Land Use (WTRLU)
# Diversity in EMS and Penn State

The College of Earth and Mineral Sciences recognizes a broad and multifaceted definition of diversity that is inclusive of nationality, ethnicity, race, gender, sexual orientation, age, ability, and religion. Diversity plays a central role in our College’s core mission to prepare our students to live, work, and lead in a global environment.

The Office of the Associate Dean for Educational Equity assesses and improves the diversity of the College and provides support for current, underrepresented students. To learn more about the Office of Educational Equity, visit [http://www.ems.psu.edu/educational_equity/](http://www.ems.psu.edu/educational_equity/).

We highly recommend A Framework to Foster Diversity at Penn State as an important reference for our students: [http://www.equity.psu.edu/Framework/index.html](http://www.equity.psu.edu/Framework/index.html).

## James Guyton
Coordinator of Multicultural Affairs,
Office of the Associate Dean for Educational Equity
204 Deike Building
jrg6@psu.edu
814-867-2455

## Ronald Redwing, Ph.D.
Associate Dean for Educational Equity
204 Deike Building
rdr10@psu.edu
814-867-2455

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## Geography

### Contact Information

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department Head</td>
<td>Dr. Cynthia Brewer</td>
<td>814-865-5072</td>
</tr>
<tr>
<td>Undergraduate Advisor</td>
<td>Jodi Vender</td>
<td>814-863-5730</td>
</tr>
<tr>
<td>Director of Undergraduate Programs</td>
<td>Dr. Donna Peuquet</td>
<td>814-863-0390</td>
</tr>
<tr>
<td>Undergraduate Administrative Support/Receptionist</td>
<td>Melissa (Missy) Fischer</td>
<td>814-865-3433</td>
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</tbody>
</table>

## Majors

**Geography B.A. (GEOBA)**

- General (GEN)
- Human Geography (HGEOG)
- Nature-Society Geography (NTSCG)

**Geography B.S. (GEOBS)**

- General (GEN)
- Geographic Information Systems (GIS)
- Physical/Environmental (EGEOG)

## Computer Facilities

<table>
<thead>
<tr>
<th>Location / Hours</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>208 Walker Building</td>
<td>M-F 8:00am-6:00pm w/ class priority</td>
</tr>
<tr>
<td>229 Walker Building</td>
<td>M-F 8:00am-6:00pm w/ class priority</td>
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</table>

### Advanced Geographic Information Systems (AGIS) Lab:

<table>
<thead>
<tr>
<th>Location / Hours</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>123 Walker Building</td>
<td>M-F 8:00am-6:00pm via card access w/ class priority</td>
</tr>
</tbody>
</table>

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[http://www.geog.psu.edu/undergrad](http://www.geog.psu.edu/undergrad)

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Diversity in EMS and Penn State

http://www.ems.psu.edu/educational_equity/
EMS College Resources

Irvin Hall
http://www.irvin.psu.edu

Irvin Hall is home of the EMS Special Living Option (Interest House), which brings together students who are fascinated by the Earth, its resources, and the materials that sustain civilization. It is primarily for students enrolled in the College of Earth and Mineral Sciences, although students from other curricula are welcome.

House members participate in a wide range of academic events (such as faculty mixers, guest speaker presentations, and field trips) and social activities (such as intramural sports, house dinners, and football tailgates).

Irvin Hall is co-ed by floor and is situated in the West Halls residence area, which is conveniently located near the buildings of the EMS College. Irvin has a private computer facility and two study lounges for member use. Check out what’s happening now in Irvin Hall: http://irvinhall.blogspot.com!

Education Abroad
http://www.global.psu.edu/

The College of Earth & Mineral Sciences encourages students to take advantage of the many opportunities Penn State has to offer for international study. A study-abroad experience provides an outstanding addition to your undergraduate résumé for future employment in the global marketplace. Global literacy is greatly valued in the College and is a component of the College’s EMSAGE Laureate program.

The College supports international travel opportunities and offers an annual CAUSE class with an international travel component (http://www.ems.psu.edu/CAUSE2016). PSU’s International Programs office (http://www.global.psu.edu/) provides more information and lists current internships, travel opportunities embedded in special courses, and formal study abroad programs.

Be sure to carefully review your plans and options with your academic adviser to best fit a study-abroad experience into your degree program!

Department Contact Information

Energy & Mineral Engineering (Continued)

Environmental Systems Engineering (ENVSE)
http://www.eme.psu.edu/envse
Dr. Thaddeus Ityokumbul
Undergraduate Program Officer
204 Hosler Building
814-863-0375
Options: Environmental Systems Engineering (ENVSE)
Environmental Health and Safety (ENVHS)

Mining Engineering (MNG E)
http://www.eme.psu.edu/mnge
Dr. Jeffrey Kohler
Undergraduate Program Officer
155 Hosler Building
814-865-9834

Petroleum & Natural Gas Engineering (PNG E)
http://www.eme.psu.edu/pnge
Dr. Russell T. Johns
Undergraduate Program Officer
119 Hosler Building
814-865-0531

Energy and Sustainability Policy B.A. (ESPBA)
https://esp.e-education.psu.edu/
(On-line major available only at World Campus)
Vera Cole
Undergraduate Program Officer
World Campus

Susan Spaugh
Program Staff
418 Earth Engineering Science Building

Contact Info:
mti1@psu.edu
jk9@psu.edu
rtj3@psu.edu
vjc12@psu.edu
sns4@psu.edu

Computer Facility

Contact Person: Bob Byers
814-865-5162

Location / Hours: 318 Hosler Building
24/7 access
EMS College Resources

EMS College Financial Aid
http://www.ems.psu.edu/prospective_undergrad_students/financial_aid/sources

**Contact Information**

**Department Head**
Dr. Turgay Ertekin  
117 Hosler Building  
814-865-6082  
http://www.eme.psu.edu

**Academic Adviser**
Alisha Simon  
109 Hosler Building  
814-867-5271

**Associate Department Head**
Dr. Mark Klima  
115 Hosler Building  
814-863-7942

**Undergraduate Programs Staff**
Crystal Renaud  
115 Hosler Building  
814-863-5566

**University's Undergraduate Fellowship Office**
For more information, please visit:  
http://www.ufo.psu.edu

**Additional University Resources**
http://www.psu.edu/studentaid

**Merit Scholarships**
The College of Earth and Mineral Sciences annually awards over $500,000 in scholarship support to students based on academic excellence. The completion of an online application is required each year to receive consideration. Freshmen are not eligible for merit scholarships.

The application is available January 1st through April 15th at the following link:  
http://www.ems.psu.edu/emsscholarships

**Trustee Scholarships (Need Based)**
The College awards over $400,000 annually to students who are eligible for Trustee Scholarships, which are “need-based.” A FAFSA (Free Application for Federal Student Aid) must be completed EACH YEAR in order for the University to determine eligibility.

**Department Scholarships**
Please contact your department directly to inquire about scholarship opportunities.

**Wilson Loan**
Low-interest loans are available to all EMS students (including graduate students). Students may borrow up to $1200 per semester ($2400 per year) through the fund. No interest accrues until after graduation and repayment begins 6 months after termination of enrollment (graduation, withdraw from classes, leave of absence). The University assesses a 6% simple interest rate on these loans. Students may complete the application at any time. The application is available at:  
http://www.ems.psu.edu/prospective_undergrad_students/financial_aid/wilsonLoan

**Work Study**
If you have a work study grant, use the eLion website (https://elion.psu.edu) to view available jobs. Learn more at:  
http://www.psu.edu/studentaid/aidprog/wage.shtml.
Penn State has a disciplinary system that is in place to adjudicate cases of alleged violations of the University’s Code of Conduct by University students, found at: [http://studentaffairs.psu.edu/conduct/codeofconduct/](http://studentaffairs.psu.edu/conduct/codeofconduct/).

Students who are required to appear at any Penn State Judicial Affairs proceedings may request a Judicial Affairs Adviser to accompany them. These advisors are trained faculty or staff of the University who may assist the student in understanding the charges and what is entailed in a Disciplinary Conference and beyond, should the case go to the University Hearing Board. The JA Adviser may assist the student in the preparation and presentation of a defense, and may accompany the student to all discipline proceedings.

EMS has three trained JA Advisors, any one of whom is ready to assist you:

**Martha Traverse**

mj5@psu.edu

14 Deike Building

814-863-4024

**Tim Robinson**

robinson@psu.edu

14 Deike Building

814-863-9691

**Jim Sloan**

jimsloan@psu.edu

2217 Earth Engineering Science Building

814-865-9226

Both students and instructors are expected to be familiar with and adhere to the policies detailed in The University Faculty Senate Policies and Rules for Undergraduate Students. These policies tell you what instructors expect from you and what you have a right to expect from them. The most pertinent policies are summarized below.

- Students should attend all classes and be responsible for all class work; instructors should provide an opportunity for students who miss classes for legitimate reasons (e.g., academic field trips, required athletic events, serious illness, etc.) to do make-up work.

- When submitting jointly prepared lab reports or work that has been revised from another class, a student’s best bet is to exercise common sense and honesty. Plagiarism is always a serious offense.

- During the first ten days of a semester, students must be given written notification of general examination procedures, including those pertaining to the final examination. A student may drop a course during the first 10 calendar days of a semester without penalty; after the 10th day special circumstances apply, and the student should discuss these with an adviser.

- During the final week of classes, no examinations are to be scheduled (quizzes that are worth less than 10% of the course grade are permitted).

- Students have the right to expect instructors to act responsibly—therefore, to uphold University policies and to meet for all classes. [Academic Policies and Procedures for Undergraduate Students](http://www.psu.edu/ufs/policies/) offers advice on how a student can resolve a legitimate complaint about an instructor (See “Resolution of Classroom Problems”).

- Students not having the appropriate prerequisite courses or proper academic standing may be dropped from the course during the first 10 days of classes.

- Professors in Earth and Mineral Sciences set high standards for classroom conduct which includes courtesy, tolerance, and an opportunity for all to realize their potential. In no case should there be any harassment, special privileges, or a chilly climate for anyone!