

SCIENCE IN THE NEWS

Fall 2019

INTS 301 | 4:30- 7:10 PM [M], Thompson Hall L004

INTS 301 | 7:20-10:00 PM [M], Peterson Family Health Sciences Hall 1111

Instructor: **Joseph S. Imamura, Ph.D.**
Email: **jimamura@gmu.edu**
Phone: **303-949-5269**
Office Hours: **Mondays by appointment**

Textbook:

Hazen, Robert M. (2009). *Science Matters*. Anchor Books (2nd ed.)

Note, there are no reading assignments from this book, but it may serve as a resource for various research assignments. **Discuss with your instructor before you purchase!**

Office Hours & Communication:

Office hours will be held Mondays by appointment, only.

The best way to contact me is through Mason email. Note, Mason uses only Mason e-mail accounts to communicate with enrolled students. Students must use their Mason e-mail account to communicate with their professors, department, and other administrative units, and check it regularly for important university information including messages related to this class. If you use hotmail, gmail, etc., they will automatically go to my junk folder and I might not see it. I will try to respond within two business days.

Course Description:

Examination and discussion of the current trends in science as reported in the popular media. Students learn how to evaluate the science that is reported so they may become informed consumers; discuss how scientific advancement might shape society by looking at how science and society have changed together over time; and use examples from the past to discuss future trends.

Purpose of the Course:

THINK • CONNECT • CREATE

The purpose of this course is to pique intellectual curiosity about scientific topics that may be of personal or professional interest and with an unbiased view, consider how science shapes society through popular media. It emphasizes interdisciplinary problem-solving through critical, analytical, and integrative approaches to the study of scientific issues and trends facing the contemporary world.

Course Competencies:

Communication
Critical Thinking
Group Collaboration
Global Understanding
Well-being

See <http://integrative.gmu.edu/current-students/competencies> for descriptions.



Student Learning Outcomes (SLOs):

INTS 301 fulfills requirements for Natural Science in the Mason Core. Mason Core natural sciences courses engage students in scientific exploration; foster their curiosity; enhance their enthusiasm for science; and enable them to apply scientific knowledge and reasoning to personal, professional and public decision-making.

To achieve these goals, students will:

1. Understand how scientific inquiry is based on investigation of evidence from the natural world, and that scientific knowledge and understanding: a) evolves based on new evidence and b) differs from personal and cultural beliefs.
2. Recognize the scope and limits of science.
3. Recognize and articulate the relationship between the natural sciences and society and the application of science to societal challenges (e.g., health, conservation, sustainability, energy, natural disasters, etc.).
4. Evaluate scientific information (e.g., distinguish primary and secondary sources, assess credibility and validity of information).
5. Recognize cultural distinctions in a global environment that explain why people value scientific, economic, political, and environmental issues differently.
6. Evaluate disciplinary and interdisciplinary perspectives regarding scientific discoveries and research.
7. Use oral, written, and graphic communication to effectively explain scientific information.

Methods for Assessing Student Learning Outcomes:

The expected student learning outcomes for this course will be assessed through class assignments, independent research, team projects, and class participation.

Course Requirements/Evaluation:

Instructions for assignments will be given in class with the opportunity for students to ask questions and seek clarification.

Assignments	Pts.	Pct.	Due Date
• Class Participation & Attendance	200	20%	Every Class!
• Introductory Paper "Most significant science discovery"	100	10%	09/09
• Weekly News Reviews (10 reviews/ 10 pts. ea.)	100	10%	Varies
• Self-guided Field Trip	100	10%	09/30
• Team Project, Case Study, Presentation, Class Debate	200	20%	10/28
• Individual Research Paper, Case Study & Presentation	200	20%	11/11
• Reflection Paper	100	10%	11/25
TOTAL	1,000	100%	

Grading Scale:

- 90 - 100% = A
- 80 - 89% = B
- 70 - 79% = C
- 60 - 69% = D
- 0 - 59% = F



Class Participation & Attendance:

BE ENGAGED

Class participation is a critical element to help you earn the highest grade possible and get the most out of this course. **Your ideas matter!** And, respectful engagement (civility) by everyone will enable us to have meaningful discussions that may lead to new conclusions about topics that are of interest to you!

Late Work:

Assignments are due at the beginning of class. Assignments that are turned in late via email will receive a 10 point penalty the first day and a 5 point penalty each day after that. No assignment will be accepted more than three (3) days late. If a student makes arrangements with the instructor in advance to modify the due date because of an excused absence and the student fails to meet a revised due date, then he/she will receive a zero (0) for the assignment. If a student has an unexcused absence, no late work will be accepted.

Submission Requirements:

Use the following criteria for your assignment submissions:

- **Calibri font**
- **11 pt.**
- **Double space; 1" margins**
- When preparing your assignments, follow these guidelines for your paper headings: (Top of page; LEFT justified; SINGLE space for the heading, but double space for the rest of your document).

Your name (First and last...SINGLE SPACED!)

INTS 301 (Fall 2019)

Instructor Joseph Imamura, Ph.D.

Due Date

Name of the assignment

-(return)-

-(return)-

Title (centered)

-(return, single space)-

Begin your text here (left justified, double-spaced!)

Academic Integrity & Plagiarism:

The integrity of the University community is affected by the individual choices made by each of us. Mason has an [Honor Code](#) with clear guidelines regarding academic integrity. It is expected that students adhere to the following Code:

"To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the University Community have set forth this: Student members of the George Mason University community pledge not to cheat, plagiarize, steal and/or lie in matters related to academic work."



Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using MLA or APA format. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me. Also, the [Owl at Purdue](#) is a terrific resource to help check your work.

No grade is important enough to justify academic misconduct. More information about the Honor Code, including definitions of cheating, lying, and plagiarism, can be found at the Office of Academic Integrity website at <http://oai.gmu.edu>

Student Services:

Writing Center: <https://writingcenter.gmu.edu>

Online Education Services, University Libraries: <https://library.gmu.edu/for/online>

Counseling and Psychological Services: <https://caps.gmu.edu>

Student Privacy:

For more information about student privacy and student rights protected under the Family Educational Rights and Privacy Act (FERPA): <https://registrar.gmu.edu/ferpa>.

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:

As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources such as the Student support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychology Services (CAPS) at 703-993-2380. You may also seek assistance from Mason's Title IX Coordinator by calling 703-993-8730 or emailing titleix@gmu.edu.

ADA and Disability Accommodations:

If you have a documented learning disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with the [Disability Services](#) (703-993-2474) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

GMU Diversity Statement:

George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty, and staff. An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.



Religious Holidays:

It is the obligation of students within the first two weeks of the semester, to provide the instructor with the dates of major religious holidays on which you will be absent due to religious observances. Mason University Life religious holiday calendar: <https://ulife.gmu.edu/calendar/religious-holiday-calendar>.

Classroom Culture:

Arriving on time and having read the assignments before class is expected. This demonstrates respect for the learning community we are creating for one another. Supporting one another in dialogue is also encouraged. In this class we want to hear your opinions and ideas and those of others are to be respected and acknowledged even if you disagree with them. Although the instructor will provide lectures on course material, other teaching methods will be used from time to time, which will require a considerable amount of participation and discussion on your part; here, is when you have an opportunity to really demonstrate your knowledge and receive valuable participation points.

Cell Phones and Laptops:

Cell phones are not allowed in this class. Please keep them stowed away and out of sight. Laptops or tablets may be permitted for the purpose of taking notes, only. There will, however, be occasions when we will use the internet as a means to enhance our discussions

Please be respectful of your peers and your instructor and do not engage in activities that are unrelated to the class (email, texting, snapchat, etc.). Such disruptions show a lack of respect and will negatively impact your participation grade

Disclaimer:

The instructor reserves the right to revise, alter and/or amend this syllabus, as necessary. Students will be notified in class, in writing, or by email of any such revisions, alterations, and/or amendments. Students are expected to adapt to any changes in due dates, readings and schedules. If you miss a class, you are responsible for obtaining any information disseminated during that class.

IMPORTANT DATES

Registration and Tuition

Last day to add classes: **Sept. 3**

Last day to drop w/ no tuition penalty: **Sept. 9**

Final Drop Deadline: **Sept. 17**

Holidays

Fall Break: **Oct. 14**

Thanksgiving: **Nov. 27-Dec. 1**

Last Day of Class: **Dec. 7**

Mason Fall Calendar: <https://registrar.gmu.edu/calendars/fall-2019/>



Tentative Course Schedule (Aug. 26 – Dec. 7, 2019)

Class Date	Lesson	Topic	Assignment	Due Date
08/26	Course Intro	<ul style="list-style-type: none"> • Class overview • Story of Stuff 	<ul style="list-style-type: none"> • News Review 1 • Paper 1 	<ul style="list-style-type: none"> • 09/09 • 09/09
09/02	LABOR DAY- No Class			
09/09	Lesson 1	<ul style="list-style-type: none"> • Planets: It all started with a Big Bang! • BBC Planets 	<ul style="list-style-type: none"> • News Review 2 • Field Trip 	<ul style="list-style-type: none"> • 09/16 • 09/30
09/16	Lesson 2	<ul style="list-style-type: none"> • Ecology: How Much Can One Planet Take? • Plastic Ocean 	<ul style="list-style-type: none"> • News Review 3 • Draft Paper 2 	<ul style="list-style-type: none"> • 09/30 • 10/07
09/23	Lesson 3	<ul style="list-style-type: none"> • National Building Museum: • Making Room: Housing for a Changing America • Secret Cities: The Architecture and Planning of the Manhattan Project • Smithsonian Natural History Museum: • Outbreak: Epidemics in a Connected World • Biodiversity: • National Zoo 		
09/30	Lesson 4	<ul style="list-style-type: none"> • Health & Food Systems: What's in this? • Sustainable/ Food Inc. 	<ul style="list-style-type: none"> • News Review 4 	<ul style="list-style-type: none"> • 10/07
10/07	Lesson 5	<ul style="list-style-type: none"> • Environment & Sustainability: Resilient Cities! • Strip the City/B4 the Flood/Inconvenient Truth 	<ul style="list-style-type: none"> • News Review 5 	<ul style="list-style-type: none"> • 10/14* • <i>via email</i>
10/14	FALL BREAK- No Class			
10/21	Lesson 6	<ul style="list-style-type: none"> • Energy & Technology: Renewable energy? • Team Workshop 	<ul style="list-style-type: none"> • Team Project 	<ul style="list-style-type: none"> • 10/28
10/28	Lesson 7	<ul style="list-style-type: none"> • Energy & Technology: Let's talk! • Team Presentation & Class Debate 	<ul style="list-style-type: none"> • News Review 6 • Paper 2 Final 	<ul style="list-style-type: none"> • 11/04 • 11/11
11/04	Lesson 8	<ul style="list-style-type: none"> • Science & Archeology: Back to the future! • e2 PBS Machu Picchu, Stonehenge, Easter Is. 	<ul style="list-style-type: none"> • News Review 7 	<ul style="list-style-type: none"> • 11/11
11/11	Lesson 9	<ul style="list-style-type: none"> • Individual Presentations: • Class Discussion 	<ul style="list-style-type: none"> • News Review 8 	<ul style="list-style-type: none"> • 11/18
11/18	Lesson 10	<ul style="list-style-type: none"> • Individual Presentations: • Class Discussion 	<ul style="list-style-type: none"> • News Review 9 • Reflection Paper 	<ul style="list-style-type: none"> • 11/25 • 11/25
11/25	Lesson 11	<ul style="list-style-type: none"> • Individual Presentations: • Class Discussion 	<ul style="list-style-type: none"> • News Review 10 	<ul style="list-style-type: none"> • 12/02
11/27-11/29	THANKSGIVING- No Class (GOBBLE! GOBBLE!)			
12/02	Lesson 12	<ul style="list-style-type: none"> • TBD: Guest Lecture • Class Discussion 		
WINTER BREAK!!				

There are no additional assignments, no final exam, and no extra credit offered.



Name: _____

Major: _____

Topping: _____

Other information: _____

