SCIENCE IN OUR WORLD: CERTAINTY & CONTROVERSY
FALL 2016 SYLLABUS

There is nothing which can better deserve our patronage than the promotion of science and literature. Knowledge is in every country the surest basis of public happiness. —George Washington to Congress, January 8, 1790.

"Scientific knowledge is a body of statements of varying degrees of certainty - some most unsure, some nearly sure, none absolutely certain" —Richard Feynman (1918-88, Nobel prize in Physics 1965)

To be scientifically literate is to empower yourself to know when someone else is full of bullshit – Neil deGrasse Tyson

Welcome to SC200

Science will be part of the solution to every problem in the 21st century - and it will continue to illuminate humanity and humanity's place in the universe. This means it is not enough for universities to train scientists to do science. Non-scientists need to be scientifically literate too. Scientific literacy involves more than knowing something of what scientists have already learnt. It also involves an appreciation of the importance of science for daily life, business, politics, our collective future and our view of ourselves. And, just as importantly, it involves an ability to evaluate the science reported to non-scientists and to draw sensible conclusions from it. It is impossible to do any of that without understanding how scientists grope and stagger forward, and how their efforts appear in the media. **The aim of this course is to make the citizens and leaders of the future better consumers of science.**

Course Description

3 credits, non-science majors, assumes no background knowledge, and possibly even a loathing for science.

Location: 105 Forum. **Class Time:** Tuesday and Thursday**, 1:35pm-2:50pm**

Course Objectives

By analogy with literature, dance, wine, food and music appreciation courses, this is a science appreciation course. With extensive use of case studies, we will help students develop a critical appreciation of the process of scientific discovery and its implications.

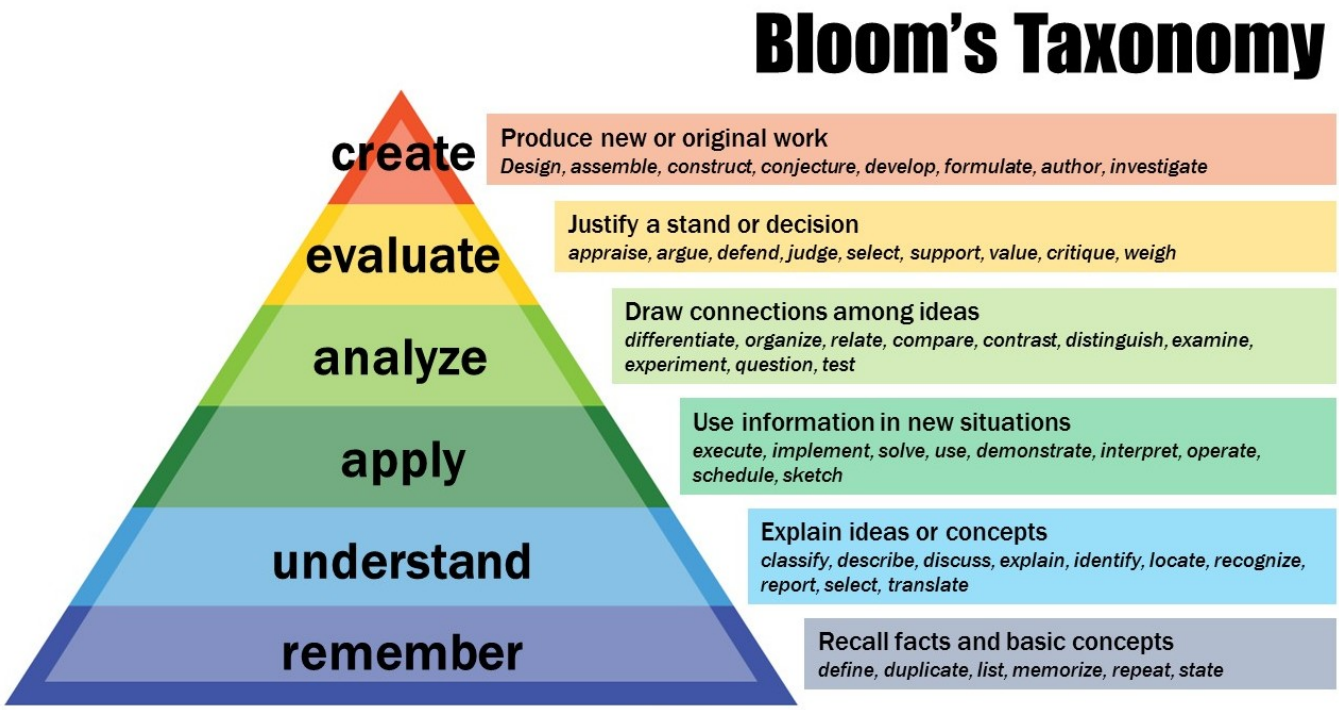
1. ***The meaning, use and diversity of the scientific method***
   - Science is both imaginative and highly disciplined.
   - Science is a very successful way to gain knowledge.
   - Science is a human endeavor and so is often flawed, yet it can in the long run draw powerful context- and culture-independent conclusions.
   - Why it works: organized skepticism.
   - What conflicting evidence means and how we can sort it out (not all data are equal).
   - Why absolute proof is rare in science.
   - What is meant by certainty in science - and how scientists convey it, and why it usually can't be conjured up overnight.
   - What science can and cannot deliver (knowledge and ethics).
   - Why it is hard to aim science at a target.

2. ***The difference between good science, bad science, pseudoscience and everything else; evidence versus conviction; skeptics versus deniers***

3. ***The societal implications of thinking scientifically***
   - The impact of science on humanity's view of humanity.

- The enormous impact science will continue to have.
- The contemporary utility of science for everyday life, for business and for governance.
- Science is a civilizing enterprise that generates wonder and awe.

But of course we have grander goals beyond the specific course objectives. We are using science and the scientific method to repeatedly work our way up and down the full range of what is known as Bloom's framework for educational goals.



From https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/

Despite what you might have gleaned from your K-12 Science and Math experiences, least important in SC200 (and indeed science, and life) is memorized facts. SC200 is aimed at preparing you to think and learn more effectively in the rest of your college career, and in your subsequent professional and personal life.

Learning how to think really means learning how to exercise some control over how and what you think. It means being conscious and aware enough to choose what you pay attention to and to choose how you construct meaning from experience. Because if you cannot exercise this kind of choice in adult life, you will be totally hosed. – *David Foster Wallace*
https://www.1843magazine.com/story/david-foster-wallace-in-his-own-words

Course Director

Dr. Andrew Read, SC200@psu.edu
Director, Center of Infectious Disease Dynamics, www.thereadgroup.net
Evan Pugh Professor of Biology and Entomology,
Eberly Professor of Biotechnology,
W-230A Millennium Science Building,
Office Phone: 814 867-2396
Staff Assistant: Monica Arismendi 814 863-6471 SC200@psu.edu
Office Hours: By Appointment. But appointments are most likely to be straight after class, so just ask after class.

Undergraduate Teaching Assistants

Eric Choi efc5151@psu.edu, Brian Dougherty bpd5153@psu.edu and Sara Sokoloski sjs6082@psu.edu. They can help with anything. They are not involved with grading.

Guest Instructors

For updated list and full contact details, see the class blog.

Course website

The course site is at Angel (https://cms.psu.edu). This site will contain administrative material, including timetable changes, class handouts (lecture notes will not be provided in full – handouts are to assist in note taking), tests in real time, and grades in semi-real time.

Course blog http://sites.psu.edu/siowfa16/

This can be read by anyone anywhere, but you can only post to it if you are registered on this course. Note that the posts will have to be done with your PSU ID and so will not be anonymous. Instructions on how to post are given at http://sites.psu.edu/siowfa16/tech-faq/.

Instructor blog http://sites.psu.edu/siowreflections/

This site (live linked from the course blog), summarizes the history, rationale, and background for this course. Andrew will blog about how he thinks the course is going, why things are being done the way they are, and student reaction. This is where generic feedback on tests and the blog will appear, together with grade distributions. You are very, very welcome to post comments, anonymously if you want. Nothing on the instructor blog is subject to assessment – say what you want.

Classroom Interaction

Talking is good, and has worked for millennia. So you can put your hand up at any time, and instructors will frequently ask the class questions and expect old fashioned verbal responses. We like to talk.

But we also like Poll Everywhere http://www.polleverywhere.com/ software which enables you and us to do both these things in a slightly more anonymous way by text or web interface. How to do this is on the Tech FAQ page on the course blog http://sites.psu.edu/siowfa16/tech-faq/. In most classes we will also have a Poll Everywhere channel for you to ask open-ended questions (the **'Comment Wall'**). We will attempt to monitor this back channel in real time during class. If you feel too nervous to stick your hand up, use this channel.

If you use the internet via a smart phone wirelessly through the university, there is no charge. If you access Poll Everywhere by text from your cell phone, there is the standard rate text message, so it may be free, or up to twenty cents on some carriers if you do not have a text messaging plan. See Andrew if you think you have to pay. Poll Everywhere is very serious about privacy. We cannot see your phone numbers, and you'll never receive follow-up text messages other than perhaps a text that your vote was received or that you did something wrong.

Materials you need for this class

There is no text book. Everything will be presented in class, or you will find it on the web or on Angel. RELIABLE 24/7 internet access is essential. If this is a problem, let Andrew know by the end of the first week.

E-mail

Important notifications will be made in ***class and by email to your PSU accounts***. It is your responsibility to check your email frequently (daily). If you have your PSU email redirected to another account (e.g. gmail), it is your responsibility to make sure you are getting course emails. If in doubt, email us at sc200@psu.edu and ask us to email you back. Under NO circumstances will failure on your part to read an email count as extenuating circumstances.

Assessment

40% Digital Expression: All of the written work and much of the exchange of ideas in this course will take place on the course blog. Students are required to write posts and comment on the posts of others. This participation will be assessed three separate times during the semester according to the rubric at the end of this syllabus. **Your best score from among the three periods will be taken as the blog grade.** Initial blog posts (see below) do NOT count towards the first blog period.

Blogging frequency requirements are summarized in the table on the next page. You can check how many posts you've made, and when, on the 'Contributions' page on the class blog. The assessment periods are defined by DATE – comments on entries from earlier periods are welcome and will be assessed in the period in which they are made.

4% Initial Blog posts: This task is to ensure you can work the blog. Post an entry which explains (i) why you are doing this course and (ii) why you are not planning to be a Science major, AND post a comment on someone else's post. ***The entry must include a picture and at least one live link, and the comment must include at least one live link.*** You get marks for simply posting an entry (50%) with a photo (20%) and a live link (5%), and for posting a comment (20%) with a live link (5%).

0%* Plagiarism quiz. This will be posted on Angel early in the course. You must get 100% on this quiz and you must achieve that by **Noon Sept 12.** If you do not get 100% by that date, no further grades will be returned to you and you will **receive a FAIL grade for the entire course**. You can retake the test as many times as you want before the deadline.

26% Class tests: There will be four of these during the semester, administered via Angel, so they can be taken on any internet-connected computer within the specified 24-hour period that the test is live. These will be multi-choice questions, open-book **[you can consult anything you want except another person]**. The questions will cover the material to that point in the course. You can take each test twice in the 24-hr period; we take your best score. The best two scores from the four class tests go to your class test grade.

0% Pop-quizzes: These will occur within class times throughout the semester, usually without warning. They are intended to provide you and the instructors with immediate feedback on how you are getting on. The score you get on them does NOT count towards the final grade.

10% Attendance: Your presence will be determined from the sheet attached to each pop quiz which you must hand back at the time. There will be twelve or more pop-quizzes at random and unannounced times during semester. To earn the 10% attendance credit, **you must be present at nine or more.** If you are present at eight or fewer, you get zero for attendance.

20% Final Exam: This will be identical in format as the class tests and will be administered via Angel in the same way. It will cover the entire content of the course. The final exam will be available for five days and you can take it twice in that period; again, we take your best score.

10% Extra credit: This can come from a variety of sources (see below) to maximum 10%.

Thus:
100% on the plagiarism test is a compulsory requirement. Once that is achieved, then:

Best 1 of 3 Blog periods	40%	=max 40%
Best 2 of 4 class tests	13% each	=max 26%
Final 'at home' test	20%	=max 20%
Initial Blog post	4%	=max 4%
Attendance	If present at nine or more pop quizzes	= 10%

Extra credit is added, up to 10%.

Extra credit

This can come from the following sources.

(1) **Individual blog posts** that are particularly lucid, stimulating, artistic or lateral (max 5% per post). This is to encourage outstanding work.

(2) **Suggested exam questions**. These should be multiple choice, in the style of the questions in the class tests and e-mailed to Andrew (sc200@psu.edu) at least one week before the final exam. If they are different from any questions you've already had, and they get used (or something close to them), you get the extra credit, at 2.5% per question. Sending lots of (good) questions increases your chances of hitting on questions that get used. You'll get up to 10% extra credit and know the answers! This is to encourage students to think deeply about the course material (you really have to understand your stuff to write exam questions).

(3) **Finding a mistake** in a class test or the final exam. If you think you have found a mistake that would cause scores to be changed, e-mail Andrew (sc200@psu.edu) outlining your reasoning. If you are the first to raise the argument, and he buys it and it causes him to re-grade the question, he will email the class explaining why and how the marks will be adjusted. Max. 5% per error. This is to encourage students to think hard about the questions. Andrew rarely makes mistakes.

(4) **Fulfilling frequency requirements in the first blog period by Noon, Sept 16** (ie 3 posts and 10 comments) (1%). This is an anti-procrastination carrot.

(5) **Posting blog entries roughly weekly, and none in the week before a blog period deadline**. To get this extra credit for a blog period, the number of blogs required for that period (see table below) must be posted (2% for any Blog Period, to a maximum of 4%). This is a time management carrot.

(6) We will have up to four classes where you can **surrender your phone** to the TAs for that class. 1% extra credit per class. This is a carrot to demonstrate and reduce the problem of multitasking.

(7) Extra blog posts responding to the **challenge question**: Pick something that you have learned in this course and explain how it has or might change your life. Students submitting a post on this must email the link to Andrew (sc200@psu.edu) by Monday, Dec 5. Extra credit for these will be awarded, without personalized feedback, as 0% (superficial), 1% (fair) or 2% (evidence of deep thought and engagement), to a maximum of 2%.

(8) **Opt in to 'names in a hat'**. The name of students who opt in will be placed in a hat and randomly called on in class to answer questions. When a student whose name has been called does respond, they will receive 1% extra credit and their name removed from the hat. Names will go back into the hat once everyone who has opted in has responded once. Extra credit to a maximum of 2%. This is a carrot to encourage verbal participation in class, recognizing that not everyone feels comfortable answering questions in real time in front of an audience of hundreds but that everyone should be encouraged to try. To opt in, you must email sc200@psu.ed by Noon September 2.

How many blogs and comments?

For an A grade on the frequency part of the rubric (see end of this syllabus), you need to post the following *within* a blog period. Note however that a grade for a blog period is primarily determined by the quality of posts. Outstanding posts can make up for a deficit of posts; the right number of posts can still get a D (or lower) if the other criteria for an A are not achieved. *Note that the Initial Blog Post does NOT count towards the numbers in Blog Period 1.*

	Blog Period 1 *Aug 23-Sept 16*	**Blog Period 2** *Sept 17-Oct 21*	**Blog Period 3** *Oct 22-Dec 2*
Number of posts	3	5	5
Number of comments	10	15	15

Digital Expression

We are deliberately broad minded about what the blog posts might concern (within the broad constraint that they be relevant to the course). There are two types of posts: entries and comments. Posts might cover, for example, reaction to the course material, disagreements with what the instructors have said, questions, background material missed in class, different perspectives, verifying cases, contrary examples, cool things going on elsewhere

in science – or in the non-science world – which might be of interest in the context of this course. Confused about something in the course? Post the question to the class. The right post could send the class off in new directions.

Class Tests and Final Exam

These all have identical format: about half the questions will cover material discussed in class, the other half will apply the concepts to a previously unseen media report. Each test and the final exam will consist of 28 questions, but we take the mark out of 25. Thus, you can get three questions wrong for free. Your score only starts to dip below 100% when you get the 4th question wrong. There is no extra credit for class tests (maximum 100%). This system allows us to stretch you and force you to think hard, and to better evaluate our teaching, without brutally penalizing you for the odd incorrect answer. Note this system very effectively rewards people who get only a few questions wrong. It has very little impact on scores when a quarter or more of the questions are answered incorrectly.

Important dates

Late Drop Deadline – Friday, November 11
Withdrawal Deadline – Friday, December 9

Deadline for Initial Blog posts– Noon, Wednesday August 31

Deadline for opting in to Names in the Hat [extra credit] – email (sc200@psu.edu) by Noon, Friday September 2
Deadline for Plagiarism test – Noon, September 12

End 1st Blog Assessment period – Noon, Friday September 16
End 2nd Blog Assessment period – Noon, Friday October 21
End 3rd Blog Assessment period – Noon, Friday December 2

Class Test 1 – All 24 hours of Monday, September 12
Class Test 2 – All 24 hours of Monday, October 10
Class Test 3 – All 24 hours of Monday, October 31
Class Test 4 – All 24 hours of Monday, December 5

Final date for e-mailing Andrew potential exam questions [extra credit] – Monday, December 5
Final date for e-mailing Andrew links to challenge question blog [extra credit] – Monday, December 5

Final Exam - available 24 hours/day Friday December 9 through Tuesday December 13.

Deadlines for on-line tests and exams are hard deadlines. When a test goes dead, it's gone.

Deadlines for Blog Periods are absolute, even if the blog site crashes as it can do under weight of people posting at the last minute. The Federal Government does not grant extensions when their computer systems fail, and neither do we.

How to get help

Course administration and assessment: contact Andrew (at end of class or by e-mail SC200@psu.edu).

Course content: There are various options here.

- Put your hand up in class! This approach is an oldie but a goodie.
- Ask using the on-line real time Poll Anywhere back channel (Comment Wall) during class time.
- Post a question directly to the Course Blog.
- Post a comment to the Instructor Blog.
- Ask the relevant instructor at the end of class.
- Ask any of the TA's at the beginning or end of class.
- E-mail the course team SC200@psu.edu. The question and reaction could be posted on the course blog.
- E-mail any of the TA's. They may well post the question and reaction on the course blog or Angel.

Blog and Tech help: See FAQ page on course blog http://sites.psu.edu/siowfa16/tech-faq/. If that doesn't help, email one of the class TA's, Eric Choi efc5151@psu.edu, Brian Dougherty bpd5153@psu.edu or Sara Sokoloski sjs6082@psu.edu.

Grading Scale

Final grades will be assigned based on the following percentages. These categories mean we round final grades only from the second decimal place. http://sites.psu.edu/siowreflections/2015/12/17/more-on-rounding/

A	95-100%
A-	90-94.9%
B+	87-89.9%
B	83-86.9%
B-	80-82.9%
C+	75-79.9%
C	70-74.9%
D	60-69.9%
Fail	<60

There will be no expected mean, no curving, no bell curve, no nothing. If you all get A's, Andrew will be delighted. If you all get D's, he'd be disappointed but, well, you'll still all get D's.

Attendance, missed classes and missed assessment

The best way to succeed in SC200 – and to make the most of what College offers – is to attend class. If you miss class for any reason it is your responsibility to catch up, and you will need to get notes from another student. To get the 10% for attendance, you must be at nine of the ≥12 pop quizzes which happen at random and unannounced times throughout the semester. **If you are present at only eight or fewer, you will get a zero for attendance – i.e. lose 10% of the final grade. *That's a lot.*** But being at nine is easy if you come to class regularly. If you start missing pop quizzes, you are not coming to class enough.

Instructors and your classmates will appreciate it if you stay away from class when you have an infectious illness like flu. The grading arrangements enable you to do this without impacting your marks so long as you have been regularly attending when healthy. Likewise, religious holidays, family weddings, sports events, job interviews, sporting events… missing class for those things make no difference ***so long as you are otherwise attending regularly***. Andrew does not need paperwork or notification of absence for anything other than a situation (e.g. chronic illness) which causes you to miss many classes. If you have unexplained absences from pop quizzes early in semester, no allowance will be made for missing classes late in semester, whatever the reason.

There are no make-up class tests for this course. Since we take the highest marks from 2 of the 4 class tests spaced predictably throughout semester, you have to be REALLY unlucky for life's catastrophes to stop you getting two scores. Do not miss class tests lightly – the unexpected always strikes, especially near the end of semester. If a technical problem occurs during a class test, send an email sc200@psu.edu IMMEDIATELY. This is your proof that a problem occurred and will permit us to help you complete it.

If you are unable to take the final exam, please inform Andrew at least ten days in advance, so other arrangements can be made for you. If you are unable to take the exam over the scheduled **five** days for some good reason (extremely foul and extraordinarily persistent weather, emergency, chronic illness), please email SC200@psu.edu so we can work to reschedule. You must do this before the end of the exam period. Note, however, that there is a **five** day window in which to complete the test, and it can be done from anywhere in the world. This means that very few of life's difficulties are likely to get in the way of completing this test. If a technical problem occurs during a final test, send me an email IMMEDIATELY. This is your proof that a problem occurred and will permit me to help you complete it. Do not leave the test to the last minute.

The same thing goes for blogging. If you do nothing in Blog Periods 1 and 2, and one of life's disasters strikes in Blog Period 3, you will have to do your best in Blog Period 3, whatever.

Paid work opportunities for 2017

I will look to recruit teaching assistants from this year's class to help with the blogging next year. I will in the first instance offer this to those with the highest scores this year. This will be an exciting opportunity to get paid while building a vitae line – and most importantly, to continue thinking about science.....

Classroom Etiquette

Laptops are not allowed to be used during class. This is because they are very distracting to the people sitting around or behind. If you think you have a very strong need for laptop access, please see Andrew.

In order to create a harmonious and orderly class environment that is respectful to all and conducive to learning, especially in a large lecture classroom, we all need to act with extra consideration. The following guidelines will help us to maintain a favorable learning environment for all. Please see Andrew privately if you have any personal circumstances (e.g. a previous class far across campus) or concerns that you think might make it difficult for you to agree to any of these.

- You will arrive on time.
- You will stay to the end of class (not leave early). Late arrivals and early departures are extremely distracting for other students.
- You will refrain from talking during class except as part of an activity -- large lecture halls are designed to amplify small sounds, so even whispering can be disruptive. If you must talk, you will leave the class room.
- You will wait to begin packing up your belongings until class is over to avoid the resulting disruptive noise and distracting movement.
- You will keep your phone set to vibrate, silent, or off for the duration of class.
- You will heed the laptop policy as described above.

IN RETURN

- We will start and end class on time. This is respectful of your time.
- We will break up periods of lecture with other activities and/or occasional breaks to make it easier to stay attentive and alert.
- We will incorporate lots of pictures, movies, demos, and other multimedia where appropriate to help you visualize the material and to make class more interesting and fun.
- We will give you frequent opportunities to discuss concepts with each other. This helps you keep track of, and indeed increases, your own learning.
- We will ask you questions in class that are designed to help improve your understanding of the material.
- We will provide a welcoming environment for you to ask questions both in and outside of class.
- We will display the course announcements on the projector before class each day (though I often won't talk about them; you can read them on your own), which will include reminders about upcoming due dates.
- A member of the course team will respond to every email. If you don't get a response from one of us within 48 hours, please see me so we can track down why.

- *The Etiquette section is lightly edited from Julia Kregenow*: http://teachbetter.co/blog/2015/06/09/making-choices-and-explaining-them/

Academic Integrity

I (Andrew) am passionate about academic integrity, because it is a foundation for building integrity in all aspects of our adult lives. Academic integrity is much more than "don't cheat", though that is certainly part of it.

Academic integrity is so important because:

- Cheating in school leads to more cheating and lying later in life, in all contexts.
- Ethical decision making takes a great deal of practice, and college is the best time to practice.
- Cheating is contagious.
- You'll be happier and more committed if our class is cheat-free.
- You'll learn more.

My promises to you: I will make the material as interesting and engaging as possible, and find ways to make it relevant to your life -- even though your major is not science. Personal investment and interest in a topic makes it easier to approach tasks honestly. I will provide a wide variety of help resources to allow everyone to succeed honestly in the class without need to resort to cheating. From time to time I may offer the class opportunities to practice thinking through hypothetical ethical dilemmas, brainstorm possible courses of action, and discuss potential barriers to action. This practice will make it easier to deal with real ethical dilemmas that will inevitably arise later in life in other settings. We will also discuss practical steps you can take to minimize the chances that you will end up in bad situations where you are likely to face an academic integrity dilemma.

All Penn State policies regarding ethics, honorable behavior and academic integrity apply to this course (see links below). Be aware that academic dishonesty is not limited to simply cheating on an exam. To quote directly from the Faculty Senate Policies for students: "Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students."

Examples: Here are some specific examples (though not a complete list) to help clarify how to honestly approach this class. **Honest behavior:** Discuss concepts and ideas with the professor, TAs, and other students in the class. Talking about course concepts and homework questions with others is a great way to help one another learn. But be sure to write up any work and select/submit answers on your own. Be sure you explain everything in your own words. All work submitted by you should be an honest reflection of what you yourself personally know, understand, and can do without assistance. **Dishonest behavior:** Any action whereby a student fails to do all the assigned work on their own. This includes, but is not limited to: Getting answers from someone else. Getting assistance from someone else. Obtaining test questions in advance. Having someone else take your test or complete work on your behalf. Submitting an attendance form under somebody else's name. Submitting more than one attendance form. Submitting other people's work as your own. Falsifying or exaggerating an excuse for late or missed work. Misrepresenting any information to the instructor.

Tests and final exam in this class are open-book, meaning that you can consult **anything *except another person*.**

Blogs Sources of any material or ideas should be given (either as a hyperlink embedded in the text or as a list at the end of the post). However, ALL writing that you post, no matter how long or short, must be ***completely in your own words***. Because of significant problems in years past, this class operates a tighter rule than you may be used to. **For blog posts, *everything* must be in your own words. If you want to directly quote someone else's writing or words in a blog post, you must email Andrew (SC200@psu.edu), explain why and ask permission *in advance*.** If he gives permission, he will explain how you can make clear it is a quote. **Without that explicit permission for every single quotation, you may not quote or reproduce anyone else's words.** In other words, DO NOT COPY AND PASTE ANYTHING INTO A BLOG POST. NOTHING. ZIP. DENADA. NUTTIN.

Any work that you submit for this class may be analyzed with plagiarism detection software. Plagiarism is one of the most frequently committed violations of academic integrity in college classes. Warning: Ignorance is not a valid defense for plagiarism. Educate yourself about what constitutes plagiarism so you don't get burned. I will help educate you on this by going through the issue in class, which I will subsequently summarize in an email to you all and then you must do the plagiarism test, on which you must score 100%. If you do not get 100%, you will get a FAIL grade for this class.

Cheating demeans us all and is unfair to classmates, the teaching team and yourselves. Therefore, in this class there will be no warnings, even on a first offense. ALL instances of academic dishonesty will be pursued under University and Eberly College of Science regulations concerning academic integrity. These are covered at http://science.psu.edu/current-students/Integrity/Policy.html. Sanctions for plagiarism on blogs will be as follows. For a first offence on this course, a grade of zero will be returned for the blog period within which the plagiarism occurred and grades for all other blog periods will be halved and a further 0.5% will be deducted and the student will be ineligible for any extra credit. This means that the maximum possible overall grade achievable in the class becomes a C+. Any subsequent offenses will lead to a FAIL grade for the entire course.

If the test and the sanctions sound draconian, I am sorry, but it is a result of student behavior in years past. I am taking these steps to try to prevent all plagiarism in the first place. Should it sadly occur, the plagiarism test is to demonstrate to the College Academic Integrity committee that you are all aware of what plagiarism is, how to avoid it, and that on this course, *you cannot copy any text into a blog without Andrew's express permission*.

For more details on Penn States policies, procedures and sanctions concerning Academic Integrity, see
http://science.psu.edu/current-students/Integrity/Policy.html
http://handbook.psu.edu/content/academic-integrity
http://senate.psu.edu/policies-and-rules-for-undergraduate-students/47-00-48-00-and-49-00-grades/#49-20

I look forward to working together this semester to build a strong community of integrity!

I thank Dr Julia Kregenow (Dept of Astronomy) for extensive discussion about avoiding Academic Integrity violations in large classes, and I want to make clear that the above text is based very largely on the AI statement in her syllabi, which I have lightly edited and reproduced with her permission. The strategy of banning all quotations unless permission has been expressly given was suggested to me by Dr Jackie Bortiatynski (Dept of Chemistry), who has had success with it in large Chemistry classes.

Nondiscrimination Statement

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Discrimination against faculty, staff or students will not be tolerated at The Pennsylvania State University. Direct all enquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Boucke Building, University Park, Pa 16802-2801, Tel (814) 865-4700.

Eberly College of Science Code of Mutual Respect and Cooperation

The Eberly College of Science Code of Mutual Respect and Cooperation embodies the values that we hope our faculty, staff, and students possess and will endorse to make The Eberly College of Science a place where every individual feels respected and valued, as well as challenged and rewarded. It is available at http://www.science.psu.edu/climate/code-of-mutual-respect-and-cooperation-1.

PSU Disabilities Statement

Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Office for Disability Services (ODS). For further information regarding ODS, visit the Office for Disability Services website http://equity.psu.edu/ods/.

In order to receive consideration for course accommodations, you must contact ODS, participate in an intake interview, and provide documentation http://equity.psu.edu/sdr/guidelines. If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.

Blog Scoring Rubric

Criteria	Unacceptable (0-69 pts) D or fail	Acceptable (70-79 pts) C	Good (80-89 pts) B	Excellent (90-100 pts) A
Frequency (see Table p.5)	No or infrequent participation	In a scoring period, one entry and three comments	In scoring period, half the required entries and comments	In scoring period, all of the required entries and comments
Entries	Entries are inadequate with no evidence of engagement	Entries are adequate, but reflect superficial engagement with the material	Entries are well developed and engaged with the material; lacks conceptual clarity	Entries are conceptually sophisticated, engaged in a substantive way with the material
Comments	No or few comments on blogs of others	Comments are shallow contributions to the discussion; does not enrich discussion	Comments elaborate on existing posts with further comment/observation. Many extend beyond personal reaction	Comments analyze the posts of others, extend the discussion in new directions, relate to previous online or classroom discussion
Content Contribution	Posts irrelevant information, tangential to discussion	Repeats some previous content, does not add substantively to the discussion	Content is factually accurate, but does not include much conceptual nuance or development or reference to class material	Posts draw directly upon class material to make a creative and substantive point that extends beyond the material
Clarity & Mechanics	Unclear, disorganized, unedited, URLs given without hotlinks	Open and respectful tone, some typos, some organization	Organized, well-edited and thoughtfully composed	Organized around a central point/argument, concise, even striking formulations, clear, easy to read style
Reference & Support	No or few references or support for position	Appeals to personal experience, but not to the work/experiences of others	Incorporates the work/experiences of other students, scholars and experts	Uses references to literature, readings, personal experience, experts, etc. in ways that strongly support the main position
Connections	Establishes no or few connections with other blogs, websites, articles, etc.	Infrequently establishes connections to other blogs, websites, articles, etc.	Regularly establishes connections to internet resources and other sources of contemporary culture, news and politics	Consistently draws course material into connection with issues of the day by integrating references to blogs, websites, articles, scholarship, etc.

This rubric is lightly modified from the one constructed by Dr Chris Long, Philosophy Dept, PSU http://tinyurl.com/3nmm4or

For examples of great entries and comments from previous years, see links and thoughts at http://sites.psu.edu/siowreflections/category/how_to_get_an_a_on_the_blog/