



ARIZONA STATE UNIVERSITY  
GENERAL STUDIES COURSE PROPOSAL COVER FORM

**Course information:**

Copy and paste current course information from Class Search/Course Catalog.

Academic Unit College of Letters & Sciences Department Social Sciences  
 Subject STS Number 302 Title Philosophy of Science and Technology Units: 3  
 Is this a cross-listed course? (Choose one) NO  
 If yes, please identify course(s) \_\_\_\_\_  
 Is this a shared course? (choose one). If so, list all academic units offering this course NO  
 Course description: \_\_\_\_\_

**Requested designation: (Choose One)**

Note- a separate proposal is required for each designation requested

**Eligibility:**

Permanent numbered courses must have completed the university's review and approval process.  
 For the rules governing approval of omnibus courses, contact [Phyllis.Lucie@asu.edu](mailto:Phyllis.Lucie@asu.edu) or [Lauren.Leo@asu.edu](mailto:Lauren.Leo@asu.edu).

Submission deadlines dates are as follow:

For Fall 2015 Effective Date: October 9, 2014

For Spring 2016 Effective Date: March 19, 2015

**Area(s) proposed course will serve:**

A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

**Checklists for general studies designations:**

- Complete and attach the appropriate checklist
  - Literacy and Critical Inquiry core courses (L)
  - Mathematics core courses (MA)
  - Computer/statistics/quantitative applications core courses (CS)
  - Humanities, Arts and Design core courses (HU)
  - Social-Behavioral Sciences core courses (SB)
  - Natural Sciences core courses (SQ/SG)
  - Cultural Diversity in the United States courses (C)
  - Global Awareness courses (G)
  - Historical Awareness courses (H)

**A complete proposal should include:**

- Signed General Studies Program Course Proposal Cover Form
- Criteria Checklist for the area
- Course Catalog description →
- Course Syllabus
- Copy of Table of Contents from the textbook and list of required readings/books

Respectfully request that proposals are submitted electronically with all files compiled into one PDF. If necessary, a hard copy of the proposal will be accepted.

**Contact information:**

Name Nicholas Alozie Phone 480 727 1395  
 Mail code 2780 E-mail: alozie@asu.edu

**Department Chair/Director approval: (Required)**

Chair/Director name (Typed): Nicholas Alozie Date: 2-11-2015  
 Chair/Director (Signature): Nicholas Alozie

Arizona State University Criteria Checklist for

**SOCIAL-BEHAVIORAL SCIENCES [SB]**

**Rationale and Objectives**

Social-behavioral sciences use distinctive scientific methods of inquiry and generate empirical knowledge about human behavior, within society and across cultural groups. Courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a complex and evolving world.

In both private and public sectors, people rely on social scientific findings to consider and assess the social consequences of both large-scale and group economic, technological, scientific, political, ecological and cultural change. Social scientists' observations about human interactions with the broader society and their unique perspectives on human events make an important contribution to civic dialogue.

Courses proposed for a General Studies designation in the Social-Behavioral Sciences area must demonstrate emphases on: (1) social scientific theories, perspectives and principles, (2) the use of social-behavioral methods to acquire knowledge about cultural or social events and processes, and (3) the impact of social scientific understanding on the world.

Revised April 2014

Proposer: Please complete the following section and attach appropriate documentation.

<b>ASU--[SB] CRITERIA</b>			
<b>A SOCIAL-BEHAVIORAL SCIENCES [SB] course should meet all of the following criteria. If not, a rationale for exclusion should be provided.</b>			
YES	NO		Identify Documentation Submitted
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Course is designed to advance basic understanding and knowledge about human interaction.	Text and syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Course content emphasizes the study of social behavior such as that found in: <ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul>	Text and syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Course emphasizes: a. the distinct knowledge base of the social and behavioral sciences (e.g., sociological anthropological). <p style="text-align: center;"><b>OR</b></p> b. the distinct methods of inquiry of the social and behavioral sciences (e.g., ethnography, historical analysis).	Text and Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Course illustrates use of social and behavioral science perspectives and data.	Text and syllabus
		<b>THE FOLLOWING TYPES OF COURSES ARE EXCLUDED FROM THE [SB] AREA EVEN THOUGH THEY MIGHT GIVE SOME CONSIDERATION TO SOCIAL AND BEHAVIORAL SCIENCE CONCERNS:</b>	
		• Courses with primarily arts, humanities, literary or philosophical content.	
		• Courses with primarily natural or physical science content.	
		• Courses with predominantly applied orientation for professional skills or training purposes.	
		• Courses emphasizing primarily oral, quantitative, or written skills.	

Course Prefix	Number	Title	General Studies Designation
STS	302	Philosophy of Science and Technology	SB

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
1. Course is designed to advance basic understanding and knowledge about human interaction	This course focuses on the nature and implications of science as a body of knowledge and as a set of practices and specific methods, and how these practices and methods differ from other human enterprises and activities. Among the issues discussed are the distinction between science and non-science, the problem of induction (AKA "Hume's problem"), the nature of scientific explanation and prediction and the relationship between the two, the confirmation of scientific theories, the nature of scientific laws, underdetermination of theory by evidence (AKA the Duhem-Quine thesis), and the nature of scientific truth.	The basic layout of the text showcases the richness of this course as a core social science course. Unit 1 examines science as a form of human knowing (as opposed to other forms of human knowing such as historical narratives, etc). Unit 2 looks at rationality, objectivity, and values in science. The syllabus shows how closely and neatly the course is tied to the contents of the text.
2. Course content emphasizes the study of social behavior such as found in anthropology, economics, cultural geography, and history.	This course focuses on organization of knowledge in the social sciences. Essentially, it is a course about how we know what we know and how we organize that knowledge. Questions about human rationality, objectivity, values, induction, evidence, prediction, etc. cut across our focus in anthropology, economics, cultural geography, and history.	The text, chapters 1-9. The syllabus shows how closely and neatly the course is tied to the contents of the text.

<p>3. a. Course emphasizes the distinct knowledge base of the social and behavioral sciences, Or b. the distinct methods of inquiry of the soicial and behavioral sciences (e.g., ethnography, hostorical analysis)</p>	<p>This course meets both of these requirements, that is, both a and b. This is what makes it a strong core social science course.</p>	<p>Units 1-3 of the text focus on the unique knowledge base of social and behavioral sciences. Units 4-9 of the text center on collection and analysis of social science data. The syllabus shows how closely and neatly the course is tied to the contents of the text.</p>
<p>4. Course illustrates use of social and bevioral science perspectives and data</p>	<p>The text in this courses focuses on traditional development, organization, and use of social science information and data.</p>	<p>Units 4-9 of the text center on collection and analysis of social science data. The syllabus shows how closely and neatly the course is tied to the contents of the text.</p>

**STUDENTS:** This syllabus represents a contract between you and the instructor. All of your obligations are made explicit herein. It is your responsibility to know what your duties are in the course, so you should read the entire syllabus carefully, and ensure that you understand what is expected of you this semester.

**STS 302: Philosophy of Science and Technology – Fall 2012 (Course # 77885)**

Arizona State University – Polytechnic Campus  
School of Letters and Sciences  
Science, Technology, and Society (STS)

Instructor: Scott Scheall  
Office: Santa Catalina Hall, 252L  
Email: [scott.scheall@asu.edu](mailto:scott.scheall@asu.edu)  
Office Hours: By appointment only (email for appointment)  
Course Format: Online/Blackboard

**Course Description:** This course focuses on the nature and implications of science as a body of knowledge and as a set of practices and specific methods, and how these practices and methods differ from other human enterprises and activities.

Among the issues discussed are the distinction between science and non-science, the problem of induction (AKA “Hume’s problem”), the nature of scientific explanation and prediction and the relationship between the two, the confirmation of scientific theories, the nature of scientific laws, underdetermination of theory by evidence (AKA the Duhem-Quine thesis), and the nature of scientific truth.

**Online Course Structure:** This is a Blackboard-mediated course. If you are properly registered for the course, then the class Blackboard page is accessible to you via your student MyASU page. You should familiarize yourself with the Blackboard site before the semester begins and seek technical assistance from the University’s computer technology group, if necessary. All ASU campuses have technological resources available to help you. Please keep in mind that your instructor is not responsible for the computer / technical aspects of the course, so please do not contact your instructor with questions about technical problems; the ASU Blackboard help desk is the proper place to begin your technical inquiries. Their information is available on ASU’s website; please perform a search on the main ASU webpage if you need to contact them.

- A lack of familiarity with Blackboard is not an acceptable excuse for missing or late work.
- All students are responsible for managing their time with respect to assignments and planned Blackboard outages. Information on scheduled system outages can be found at <http://systemstatus.asu.edu/>. A *scheduled* Blackboard outage is not an acceptable excuse for missing or late work. *Unscheduled* system outages will be dealt with on a case-by-case basis.

**Required Materials:** *Philosophy of Science: The Central Issues*, by Martin Curd and J.A. Cover (eds.) London: W.W. Norton & Company. 1998.

**Class Rules:** It is essential that you adhere to the following rules in all of your activities on the Blackboard site, as well as in all of your interactions with the instructor and your fellow students. Failure to conform to these rules will result in a lower grade:

- Be respectful of others, including the instructor, especially when they offer views different from your own.
- Be open to feedback from the instructor and your fellow class participants.
- Provide constructive feedback to other class participants.
- Do not offer unsubstantiated opinions in this course. Any opinion statements that you offer must be substantiated with evidence and arguments in support of the statement. If you can't support a statement with factual evidence, then you have no business making it. Your opinions matter in this course only to the extent that you can support them with statements of fact.
- Unless otherwise noted on the class schedule below, the school-week runs from Sunday at 12 AM through Saturday at 11:59 PM. Please note that no one is required to do any school work for this course on the weekends. If you would like to keep your weekends schoolwork-free, just complete the relevant assignments before the weekend begins. On the other hand, if you need the weekends to complete the assignments, you have that option as well. In any case, no late work will be accepted under any circumstances.

### Course Requirements:

Discussion Board Participation	40%
Midterm Exam	30%
Final Exam (not comprehensive; covers only material from midterm to end of semester)	30%

### Grading Scale (Final grades will be curved and rounded up or down to the nearest natural number):

A+	98% - 100%
A	93% - 97%
A-	90% - 92%
B+	88% - 89%
B	83% - 87%
B-	80% - 82%
C+	78% - 79%
C	70% - 77%
C-	not a grading option at ASU
D	60% - 69%
E	<60%

**Discussion Board Participation:** Most of the instructor-student interaction in this class takes place via the discussion board. Because we don't meet face-to-face, it is important that you keep up with the information distributed via the discussion board. Your understanding of the material – and, therefore, your grade – will be considerably improved if you engage with the instructor and your fellow students via the discussion board on a regular basis.

I will check the discussion board daily and will respond to questions and comments as necessary. This means that I will not comment on every posting made to the discussion board, but will correct errors, respond to questions, and provide encouragement when appropriate.

Please remember that I am here to help you. Feel free to ask any questions related to the course material. In this class, it is always true that there are no stupid questions; however, there are often (not exceptionally bright) students who don't ask any questions over the course of the semester, and who, as a result, have a nasty habit of failing. If you think you can pass this course without any

assistance from the instructor, you're likely to be very disappointed with your grade at the end of the semester.

**Discussion Board Grading:** I will post a brief discussion of the important points of each reading that is designed to improve your understanding of the material. I will also post a set of questions designed to prompt discussion of the course material; these questions will often re-appear on exams.

Discussion Board Participation is worth 40% of your final grade.

**Minimum Discussion Board Requirements:** (1) You are required to post AT LEAST three "QUALIFIED" comments or questions each week (see the criteria of a "QUALIFIED" discussion board posting below); however, you are strongly encouraged to post more often than that. In general, the more frequently you post to the discussion board and the more thoughtful your comments / questions, the better your grade will be. (2) You are required to post AT LEAST 300 words to the discussion board each week. In other words, in order to receive full credit for discussion board participation, you must complete BOTH (1) and (2) every week; it is not sufficient to do one but not the other.

In order to count as a "QUALIFIED" question or comment, a discussion board posting must satisfy the following criteria (in addition, of course, to the rules listed under "Class Rules" above):

- A "QUALIFIED" discussion board posting is AT LEAST 25 WORDS LONG. If, for example, you post in response to another student's comment "I agree with you" or something similarly brief, this does not count as a "QUALIFIED" comment.
- A "QUALIFIED" discussion board posting is THOUGHTFUL. For example, a posting that says "Science is really cool" or something similarly trite does not count as a "QUALIFIED" discussion board posting. Your discussion board postings should indicate that you've put some THOUGHT into the relevant topic.
- A "QUALIFIED" discussion board posting is WELL-WRITTEN. Any posting that is not both SPELL-CHECKED and GRAMMAR-CHECKED, or which includes misspelled words, poor grammar, or incorrect punctuation does not count as "QUALIFIED." You're all college students at a major research university, which means you should have no difficulty writing the English language properly.
- A "QUALIFIED" discussion board posting ADDRESSES THE COURSE MATERIAL. Posting the scores of the previous Sunday's NFL games or a chronological list of the American Presidents does not count as a "QUALIFIED" discussion board posting.
- A "QUALIFIED" discussion board posting REFLECTS THE STUDENT-AUTHOR'S OWN WORDS. It is OK to include quotes (assuming they're properly cited) in your discussion board postings, but any and all such quotes must be further EXPLAINED IN YOUR OWN WORDS. A posting that includes unexplained quotes from the text or from some other material does not count as a "QUALIFIED" discussion board posting.
- A "QUALIFIED" discussion board posting includes no FALSE FACTUAL STATEMENTS. Any posting that includes a false statement like, for example, "Thomas Jefferson was the 1<sup>st</sup> President of the United States" or "Facebook was invented in 1925" does not count as a "QUALIFIED" discussion board posting.
- Your "QUALIFIED" postings to the discussion board MUST ADHERE TO THE FOLLOWING SCHEDULE:

**First qualified question or comment:      Due any time before Tuesday, 11:59 PM**



**Second qualified question or comment: Due any time before Thursday, 11:59 PM**  
**Third qualified question or comment: Due any time before Saturday, 11:59 PM**

If your discussion board work for a given week satisfies all of the criteria indicated above, you will earn TEN POINTS. If your discussion board work for a given week fails to satisfy all of these criteria, then you will receive a lower grade prorated on the basis of the criteria that your work does satisfy. There are EXTRA CREDIT opportunities available each week FOR THOSE STUDENTS WHOSE WORK SATISFIES ALL OF THE CRITERIA ABOVE (students whose work for a given week does not satisfy all of the criteria are not eligible for extra credit that week). In particular, extra credit points will be assigned in the following manner

- Two points extra credit will be given to the student who posts the FIRST qualified posting each week.
- Two points extra credit will be given to the student who posts the MOST NUMBER of qualified postings each week.
- Two points extra credit will be given to the student who posts the MOST WORDS (in qualified postings only) each week.
- Two points extra credit will be given to the student who posts the BEST (i.e., MOST THOUGHTFUL) qualified postings each week.

Thus, an especially bright and hardworking student can earn up to eighteen points (out of ten) for discussion board work each week. I strongly encourage you to pursue all of the extra credit points available as it is likely that you will need these additional points at the end of the semester in order to receive the grade that you would like.

**Exams:** Your exams consist of questions that have been previously posted and addressed on the discussion board. The exams are open-note / open-book / open-discussion board. Feel free to consult the course material, external sources, the instructor, your fellow students, and the discussion board in developing the best possible responses to the exam questions. However – and this is IMPORTANT – your answers must all be expressed in your own words. I will be using the SafeAssign application, which compares your work to a large database of completed assignments both available on the internet and submitted at universities across the world, so you will be caught if you try to cheat or plagiarize. You are, of course, permitted to quote from outside sources, but all such quotes must a) be properly cited (I don't care whether you use MLA, APA, or Chicago-style citation formatting provided that you give information about the source sufficient to allow me to find it if I need to), and b) be explained in your own words. It is never acceptable to respond to an exam question by copying a quote from the textbook or from an external source without providing a further explanation of the quote in your own words.

The midterm exam covers material from the beginning of the course through the week of the midterm. The final exam covers material from the midterm through the end of the semester; in other words, the final exam is not comprehensive. Each exam is worth 30% of your overall grade.

**Exam Grading:** Your exams are graded on the basis of your ability to express an understanding of the relevant course material. This means that you must both a) *understand* the course material, and b) be able to *express / indicate your understanding of the course material in writing*. The latter requirement means that your responses must address the material presented both in the textbook and on the discussion board. You should feel free to include any outside information that might add depth and detail to your exam responses, but do not ignore the course material entirely in favor of external

sources. Of course, requirement b] also means that you must be able to write clearly, i.e., use correct spelling, grammar, and punctuation. You should always use both Spell-Check and Grammar-Check; there's no excuse for failing to do so, and I will take points off for misspellings and improper grammar and punctuation. In order to ensure that your writing meets these standards, you are strongly encouraged to take advantage of the resources at the ASU Writing Center (see below). In short, if you can't communicate your understanding of the material to me in writing, then it will be impossible for me to determine that you do, in fact, understand the material, and, therefore, I will not be able to assign the maximum points possible.

Furthermore, it is especially important that you not offer unsubstantiated opinions on exams. All of your exam questions ask for fact-based responses. They are mostly of the form, "What does author A say about subject S?" It is simply inappropriate to respond to such a question with a statement of opinion. There is an old saying about opinions that I won't repeat here, but, keep in mind that it is not difficult to have an opinion; it is more of a challenge to express an understanding of the nuances of a challenging subject matter, and, in this course, you are tested entirely on the basis of this latter ability.

**The Writing Center at the Student Services Center:** Your grade in this course is almost entirely based on your ability to express an understanding of the course material in written English. Thus, if you are to pass this course, it is absolutely essential that you be able to write well and clearly. The Writing Center at the Student Success Center is a service available to all ASU students currently enrolled in classes. For any student who is starting, in the middle, or finishing up the writing process, the Writing Center has tutors who can assist you with all areas of writing. Tutors are trained to help with all sorts of writing assignments, including but not limited to essays, applications, resumes, personal writing projects, lab reports, and so on. All appointments are 30 minutes and are scheduled in advance. Walk-ins are also welcome. However, be aware that the Writing Center does not offer proofreading services.

Hours of Operation at the Polytechnic Campus, starting September 4, 2012:

Monday	Tuesday	Wednesday	Thursday	Friday
10am – 6pm	12pm – 6pm	10am – 6pm	12pm – 6pm	10am – 1pm

Writing centers are present across all four ASU campuses, and online tutoring is also available for students who are not physically near an ASU campus. For more information, or to set up an appointment, call the Polytechnic office at 480.727.5166, or check out our website at <http://studentsuccess.asu.edu/writingcenters>.

**Tentative Course Schedule (subject to change):**

Please remember that no late work will be accepted under any circumstances—no exceptions!!!

*Section 1: Science vs. Non-science; Objective: understand different proposed criteria of science, in particular, falsifiability; understand the relevance of the demarcation problem for science education.*

**Weeks One and Two (8/23 – 9/8):** Read pgs. 1-19 (introduction, Popper and Kuhn)

Notes: You must complete the syllabus quiz posted to the discussion board before Saturday, 9/1 at 11:59 PM. You are **REQUIRED** to complete the quiz. **ANYONE WHO DOES NOT**

COMPLETE THE SYLLABUS QUIZ WILL BE DROPPED FROM THE COURSE. You will receive 5 points extra credit for completing the quiz. Please be aware that by completing the quiz you thereby agree to fully comply with its terms and conditions.

Your first qualified discussion board posting is due before Tuesday, 9/4 at 11:59 PM. From that point on, your discussion board postings should conform to the schedule indicated above.

**Week Three (9/9 – 9/15):** Read pgs. 38-61 (Ruse, Laudan, Ruse response);

*Section 2: The Nature of Scientific Explanation and Prediction; Objective: understand the logical form of scientific explanation, in particular, the deductive-nomological (D-M) model, and the role of scientific laws therein; understand the difference (and relationship) between prediction and explanation; understand the problem of induction.*

**Week Four (9/16 – 9/22):** Read pgs. 675-705 (Introduction, Carnap, and Hempel x 2)

**Week Five (9/23 – 9/29):** Read pgs. 409-411 (Introduction) and pgs. 426-444 (Popper and Salmon)

**Week Six (9/30 – 10/6):** Read pgs. 445-459 (Hempel)

**Week Seven (10/7 – 10/13):** No reading assignment; **MIDTERM EXAM due via SafeAssign by Saturday, 10/13 at 11:59 PM**

*Section 3: History of Science and Philosophy of Science; Objective: understand the relevance of the history of science for the problem of scientific theory choice; understand the Duhem-Quine thesis (i.e., the underdetermination of theory by evidence) and its relevance for scientific theory choice; understand concepts of “scientific paradigms” and “research traditions.”*

**Week Eight (10/14 – 10/20):** Read pgs. 83-118 (Introduction and Kuhn x 2)

**Week Nine (10/21 – 10/27):** Read pgs. 139-169 (Laudan)

**Week Ten (10/28 – 11/3):** Read pgs. 255-301 (Introduction, Duhem and Quine)

**Week Eleven (11/4 – 11/10):** Read pgs. 320-353 (Laudan)

*Section 4: Scientific Realism and Anti-Realism; Objective: understand the problem of scientific truth – are scientific theories true? Do the entities they postulate exist? What role does empirical evidence play in answering these questions?*

**Week Twelve (11/11 – 11/17):** Read pages 1049-1087 (Introduction, Maxwell, and van Fraassen)

**Week Thirteen (11/18 – 11/24):** Thanksgiving holiday; no assignment

**Week Fourteen (11/25 – 12/1):** Read pages 1114-1135 (Laudan)

**Week Fifteen (12/2 – 12/8):** Read pgs. 1153-1168 (Hacking)

**Week Sixteen (12/9 – 12/15):** No reading assignment; **FINAL EXAM due via SafeAssign by Saturday, 12/15 at 11:59 PM**

**Written Correspondence:** Please ensure that all of your written correspondence is professional and competently written. I will not respond to emails that are poorly written (i.e., that include run-on sentences, are incoherent, lack punctuation/capitalization, or are otherwise grammatically flawed). Typos are understandable – no one is perfect – but it is usually obvious when you have not proofread (or spell-checked) your message before sending.

The subject line of all emails should accurately reflect the reason for the message and should contain “STS 302” somewhere in the subject line. If your email is especially important, please type “URGENT” in the subject line, followed by the subject of your message.

I typically respond to emails within 24 hours. However, if you do not receive a response within 24 hours, please do not bombard my inbox with additional messages. I always respond to student inquiries as soon as I possibly can.

**General Course Questions:** If you have a general, non-specific question about either the course, due dates, assignments, or course requirements, please **DO NOT SEND ME AN EMAIL**. Instead, direct such questions to the "General Course Questions" forum on the class discussion board, and I will respond ASAP. That way, all students in the course will have access to the relevant information. If you send me an email with a general question, I will ask you to re-post it to the discussion board, so please don't bother sending me an email about such topics. Only questions that pertain to your individual circumstances alone (i.e., questions that would be inappropriate to address in a public forum) should be directed to me via email.

**Academic Integrity:** Cheating and / or plagiarism will not be tolerated. If a student is charged with academic dishonesty and found to be in violation, disciplinary action will be taken and a student's name will be kept on file. Disciplinary action may result in the student receiving an XE grade, suspension or expulsion from the academic unit, and/or referral to Student Judicial Affairs. For further information, please read the Student Code of Conduct at:  
<http://www.asu.edu/aad/manuals/sta/sta104-01.html>

**Accommodations for Students with Special Needs:** Those who would benefit from alternative accommodations and who are registered with ASU's Office of Disability Resources for Students should notify me within the first three days of class. I will gladly work with you to accommodate your needs.

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. One element of this legislation requires that all qualified students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation please contact ASU's Office of Disability Resources for Students at the Polytechnic campus. Call 480-727-1039 / TTY: 480-727-1009. Eligibility and documentation policies are available online: <http://www.asu.edu/studentaffairs/ed/drc/>

**Incomplete Grades:** A grade of "Incomplete" will be granted only in extreme situations. Please visit <http://www.asu.edu/registrar/forms/regforms.html> under the Academic Record Forms section for the Incomplete Grade Request form, which is available in both *Word* and as a PDF. The form must be completed by the student, signed by the student, the instructor, and the department chair or school director.

**Arizona Board of Regents (ABOR) Code of Conduct:** Students are required to adhere to the behavior standards listed in the Arizona Board of Regents Code of Conduct:

[http://www.asu.edu/studentaffairs/reslife/outreach/abor\\_code.htm](http://www.asu.edu/studentaffairs/reslife/outreach/abor_code.htm)

ACD 125: Computer, Internet, and Electronic Communications

<http://www.asu.edu/aad/manuals/acd/acd125.html>

and the ASU Student Academic Integrity Policy:

<http://provost.asu.edu/academicintegrity>

Students are entitled to receive instruction free from interference by other members of the class. If a student is disruptive, an instructor may ask the student to stop the disruptive behavior and warn the student that such disruptive behavior can result in withdrawal from the course. An instructor may withdraw a student from a course when the student's behavior disrupts the educational process ([http://www.asu.edu/studentaffairs/vp/safety/disruptive\\_student\\_behaviour](http://www.asu.edu/studentaffairs/vp/safety/disruptive_student_behaviour)).

**Student Support Services:** There are many support services available to students across the University

Polytechnic campus student services site: <http://www.poly.asu.edu/students/services/>

*ASU Libraries:* - <http://lib.asu.edu/>

Polytechnic campus library link: <http://lib.asu.edu/poly/>

*Counseling and Consultation:* The University's Counseling and Consultation Office provides confidential mental health and career counseling services for all ASU students:

<http://students.asu.edu/counseling>

Polytechnic campus site (Student Counseling Services): <http://students.asu.edu/counselingpoly>

*Career Services:* <http://students.asu.edu/career>

Polytechnic campus career services site: <http://students.asu.edu/career/poly>

*Student Financial Aid Office:* <http://students.asu.edu/financialaid>

*Student Health and Wellness Center:* The Student Health Center provides non-emergency medical health care to all ASU students regardless of insurance status. [www.asu.edu/health/](http://www.asu.edu/health/)

*Student Recreational Center:* The University's Student Recreational Centers offer individual and group fitness facilities, as well as information on nutrition and wellness. Use of the general facilities (weights, circuit training and cardio machines) are free, other services (yoga classes, massages) are fee-based. [www.asu.edu/src/](http://www.asu.edu/src/)

Polytechnic campus recreation center site: <http://www.poly.asu.edu/pac/>

*Student Legal Assistance:* The Student Legal Assistance office provides legal advice and counsel free of charge to all ASU students in areas such as landlord-tenant law, credit reports and collection issues, taxability of scholarships and grants, etc. Notary service is also available at no charge.

<http://www.asu.edu/studentaffairs/mu/legal/>

*Help Wiki* – provides FAQ resources for technology users at ASU. <http://wiki.asu.edu/help/>

Information Technology on the Polytechnic campus: <http://campus.asu.edu/polytechnic/uto>

*EMPACT Crisis Hotline* – The EMPACT hotline offers free 24-hour support for mental health crises. Call (480) 784-1500 in the Phoenix area, (866) 205-5229 for the toll-free number outside of Phoenix, and (480) 736-4949 for the sexual assault hotline. All services are free and confidential.  
<http://www.empact-spc.com/>

STS 302  
 catalog  
 description

Course ID:		121853	
Effective Date:	08/01/2014	Status:	Active
Description:	Philosophy of Science & Tech		Course Offering STS 302
Long Course Title:	Philosophy of Science and Technology		
Long Description:	Focuses on the nature and implications of science as a body of knowledge, set of practices, specific methods, and how these differ from other human enterprises and activities.		
<b>Course Units/Prerequisites</b>			
Minimum Units:	3.00	3.00	Last Course of Mult Term Seq: <input type="checkbox"/>
Maximum Units:	3.00	3.00	Enrollment Unit Load Calc: Actual Units
Academic Progress Units:	3.00	Course Count:	1.00
Financial Aid Progress Units:	3.00	Course Contact Hours:	0.00
<b>Course Prerequisites</b>			
Grading Basis:	Stdnt Opt	Grade Roster Print:	Component
Graded Component:	Lecture		
<b>Repeat for Credit/Status</b>			
<input type="checkbox"/> Repeat for Credit	Total Units Allowed:		3.00
<input type="checkbox"/> Allow Multiple Enroll in Term	Total Completions Allowed:		1
<b>Additional Course Information</b>			
Instructor Edit:	No Choice		
Add Consent:	No Consent	Drop Consent:	No Consent
Requirement Designation:	GS08	SB	
Equivalent Course Group:			
<b>Course Attributes</b>			
Course Attribute	Course Attribute Value	Course Attribute	Course Attribute Value
ICRS	ICOURSE	ICOURSE	ICOURSE

# Philosophy of Science

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**Recommended Readings:**

- ◎ Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1996).
- ◎ Daniel Greenberg, *Science, Money, and Politics: Political Triumph and Ethical Erosion* (Chicago: University of Chicago Press, 2003).
- ◎ Daniel Kleinman, *Politics on the Endless Frontier* (Durham, NC: Duke University Press, 1995).
- ◎ Chris Mooney, *The Republican War on Science* (New York: Basic Books, 2005).
- ◎ Sheila Jasanoff, *The Fifth Branch: Science Advisers as Policymakers* (Cambridge, MA: Harvard University Press, 1998).