

Syllabus - F'15 SRA 472.001: Integration of Privacy & Security

Instructor: John W. Bagby, Professor of IST

Office Hours: Tue & Thu 12:30-2:30 pm | Wed 11:00 -Noon & by appt.

Office: 301C IST Bldg | Phone: 3-0520 | eMail: jbagby@ist.psu.edu but Never jwb7

Class meetings: 210 IST Bldg | Tues & Thurs 11:15am-12:30 pm

Readings are organized by topic &/or week, are assigned in syllabus &/or in Angel, some will be posted JIT
Required Readings (Req'd) & Optional Readings (Opt) are so labeled & located in Angel Folders or distributed via url

Course Evaluation:

The course grade is based on several components: (1) get acquainted/low stakes Quiz, (2) two medium stakes midterm exams, (3) NO comprehensive final, (4) low to medium stakes individual assignments, (5) higher stakes team-based periodic project deliverables & (6) class participation/attendance. Exams consist of objective multiple-choice and/or essay questions. Test study guides are posted to Angel approximately a week prior to the scheduled test date. Test results are traditionally curved scores delivered in various ways as soon as possible after each test. These course grade components are weighted as follows:

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|--|--------------------|
| Quiz (in-class) | 5% |
| Mid-Term 1 (in class) | 15% |
| Mid-Term 2 (in class) | 15% |
| Individual Research Project | 15% |
| Team Research (3 deliverables) | 25% |
| Class Participation, attendance, project brief | 10% |
| Final Examination | 15% |
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| Final Course Grade (sum of above) | <u>100%</u> |

Course Policies

Interaction:

Student interaction with the instructor is encouraged to clarify assignments, deliverables, study expectations, scheduling and course content. Several forms of communication for such interaction are available including: electronic communications using e-Mail and telephone calls, face-to-face meetings (F2F) in discussions before/after class sessions, F2F during office hours and during mutually agreed upon appointments at appropriate locations, paper-based mail through the PSU inter-office system or other common carrier (e.g., U.S. Mail).

While the Angel e-mail system can be useful in some instances, be aware that for SRA 472 course contacts, it is always preferable, particularly on urgent, time-sensitive and/or extremely important matters, that eMail contacts use only the instructor's IST eMail address jbagby@ist.psu.edu. Of course, intra-team communications may use mutually agreed-upon methods if they prove to be reliable.

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Class Participation (10%):

Attendance is mandatory and expected for all classes, tests and group activities. Attendance is taken by student entry of the PIN (Angel attendance code) which should be entered by each student for each class period from a PSU 202 IST classroom device (IP addresses map to attendance PINs) sometime during each class +/- 10 minutes. No personal devices (or non-202 IST Bldg IP address sourced PIN entry e.g., wi-fi'd laptops, off-site IP address) are acceptable. Written exams verified with student ID substitute as attendance verification on exam days.

Class participation component of the grade is also based on class discussions and team attestation(s). Team attestation(s) are achieved by means of mandatory teammate assessments and disclosures of work division within a team for each Team deliverable. During each exam, your identity will be verified against your Penn State ID card as you turn in your completed examination materials.

Project Briefs on the last day of class are very short ppt and spoken presentations by teams of the most significant findings and implications of their Team Research Reports. These are absolutely limited to 10 minutes, teams must be ready to go immediately upon completion of prior team's brief. Questions to any/all teams are left to the end of all briefs except to the extent the instructor seeks clarification or emphasizes points during any particular team's brief.

Quiz, 2 Mid-Term (unit) Exams & Final Exam (50%):

Half of the course grade depends on your performance on various tests. Sample questions and study guides are posted to Angel and in-class discussion of these tests will reinforce their importance and prepare students. All these study guides and other deliverable specifications contain mandatory policies for success in all aspects of the course.

Individual Research Report Project (15%):

An individual writing project is due Fri.10.7.14 on a topic to be determined. An exemplar on the role of technology, as represented by intellectual property (IP) in privacy and security technologies (e.g., privacy enhancing technologies=PET) will be accessible from Angel. Individual researchers may collaborate with their teammates, but their individual papers must be original, not team products, and these 10 page (minimum) papers (including bibliography and visual) are NOT to be developed by teams.

Team Work: Deliverables (25%):

All students will become part of groups a/k/a teams and are expected to fully participate in all required group activities, including development of all deliverables for the research report (worth 35% of the final course grade but divided into three separately graded deliverables) with an illustrative visual graphic, also required. Team attestations are used to verify forthright team participation.

Team selection will be accomplished during the first week of class, and short opportunities provided to meet and exchange contact information in class. It is recommended, but not required, that teams study together for exam preparation. Team attestation that evaluates other teammates contributions is required but is made part of the class participation component of the course grade.

Each team will research a topic in electronic surveillance approved by the instructor. The team will prepare a research report configured as a

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written narrative document submitted as a pdf file. These will be posted by the instructor. Team projects will be posted for in-depth study by all class members during the final week of class. Final exam questions may be taken from each and every team's project briefs presented to the whole class on the last day of class.

These research reports should enable other users to explore and gain a deeper understanding of an important legal, regulatory and/or public policy issue in information science and technology, security and risk analysis and/or information assurance. Such reports require several interrelated efforts: the development of a research question directly related to course subject matter, coordination of teamwork for this substantial research project, and considerable research, writing and revisions compliant with the instructor's feedback.

Team Research Reports are built progressively through three deliverables briefed below, and culminates in a final report. More detailed specifications will appear on the SRA 472 Angel website in the team research report folder(s). All deliverables must include the submitting team's number and names of all teammates at the top and team attestation at the bottom.

Files for all deliverables must follow this format - D2T3.pdf – which stands for Team Research Report Deliverable #2 from Team #3 and in only the format .pdf.

- D1 (Fri.10.22.15) proposal and workplan: description of proposed research project, provisional title, a team contract (3 pages minimum)
- D2 (Fri.11.6.15) well-developing bibliography & extensive outline (10 pages minimum)
- D3 (Fri.12.4.15) **completed report** (no length minimum but must cover topic adequately & comply with all feedback)

Feedback is provided between each deliverable requiring the team members to focus or refine their next deliverable. Success is largely dependant on the depth of research, insightful findings but most importantly the team's faithful compliance with feedback.

Only ½ credit is possible for deliverables submitted after the due dates; stated another way: late submissions without the benefit of a previously approved request for a deadline extension will receive ½ credit.

Traditionally Curved Grading Scales: No pre-determined grading scale is used in this course (e.g., 90, 80, 70)! This means student raw scores are not adjusted. Instead, scaling using letter grade cutoffs tune appropriately adjusted to the resulting raw score distribution. Each of the graded items (e.g., Mid-Term I, Quiz) are curved separately using traditional and competitive criteria. Each graded item will have an independently determined scaling so the “cutoffs” for every letter grade will be expressed in percentage numbers and distributed with scores and unique cutoffs sent to students. It is imperative that students keep good records of each graded item score and the associated grading scale so they can approximately monitor their progress towards their final course grade. This traditional system will be exemplified with the (get acquainted with real policy instruction) Quiz and then exemplified thereafter with every other graded item. The final weighted, averaged scores accumulate to the course score and a separate curve is applied using the same method exemplified by all other graded items. Please inquire early in the semester to better understand this AND keep you own grade records – Angel Gradebook is NOT used given its well-known and widespread problems.

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SRA 472 - Class Schedule – Fall 2015

All readings are linked or provided by posting for browse or download from Angel. Readings are located in Angel folders for each class week and are designated as **Angel Req'd** or **Angel Opt**. Angel readings t/b/a will be announced when posted. Topics on this class schedule will be covered as time permits. Schedule changes are posted to Angel and announced in class. Note the deliverables are abbreviated below in the class schedule, e.g.: **D2**= Deliverable #2; **Q**=Quiz; **MT**=Mid-term Exam.

| Week No. | Tuesday: Assignment/Readings/Deliverables/Activities | Thursday: Assignment/Readings/Deliverables/Activities |
|----------|--|--|
| 1 | Aug.25 | Aug. 27 |
| | Course Introduction Critical Thinking, Plagiarism | Conceptual Privacy Privacy & Security Technologies: IP & Privacy by Design |
| 2 | Sept.1 | Sept. 3 |
| | Research & Integration Analytics | Privacy Standards: FIPP |
| 3 | Sept.8 | Sept.10 |
| | Privacy Standards: FIPP | Quiz: in-class Project Management in Policy Research |
| 4 | Sept.15 | Sept.17 |
| | Self-Regulation | Traditional Security Policy Regime |
| 5 | Sept.22 | Sept.24 |
| | Security Standards: ISO 27,000 Series | <u>Mid-Term 1</u> |
| 6 | Sept.29 | Oct. 1 |
| | Int'l Privacy & Security: EU Data Privacy Directive | Int'l Privacy & Security: EU Data Privacy Directive |
| 7 | Oct.6 | Oct.8 |
| | Sectoral Privacy & Security: Financial Services Indiv. Privacy/Security Technology Paper Due 10.6.15 | Sectoral Privacy & Security: Health |
| 8 | Oct.13 | Oct.15 |
| | Sectoral Privacy & Security: Online | Sectoral Privacy & Security: Mobile <u>DI due Fri. 10.16.15 @ 11:59 pm</u> |

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| 9 | Oct.20 Sectoral Privacy & Security: Cloud | Oct.22 Security vs. Privacy Conundrum or Complement |
| 10 | Oct.27 Managing Privacy & Security | Oct.29 Managing Privacy & Security |
| 11 | Nov. 3 Privacy by Design: Enhancing vs. Invasive Technologies | Nov.5 Privacy & Security Deployment D2 due Fri.11.6.15 @ 11:59 pm |
| 12 | Nov.10 Privacy Analysis & Impact Assessment | Nov.12 Mid-Term 2 |
| 13 | Nov.17 Outsourcing | Nov.19 SAS 70/SSAE 16 |
| 14 | Nov.24 <u>Thanksgiving Break: no Classes</u> | Nov.26 <u>Thanksgiving Break: no Classes</u> |
| 15 | Dec. 1 Security Audit | Dec.3 Professionalism D3 due Fri.12.4.15 @ 11:59 pm |
| 16 | Dec.8 Professionalism | Dec.10 Team Presentation of Project Briefs |
| 17 | Final Exam t/b/a | Final Exam t/b/a |

Guide for Policy Studies

Guidance in Preparing for Classes:

Carefully read and reason through all the readings **before the class** on which they were assigned. Highlighting or underlining key words, definitions and clarifications is an important study tool. Taking notes that restate the concepts in your own words is a proven method to imprint the material in your mind. Reading too quickly or skimming to finish more quickly is not a sufficient method and it will likely result in lower

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scores than are possible with more intensive study. Come **prepared to each and every class**, having read and reasoned through the assigned readings before the lecture on the topic in the assigned readings. Follow along with the PowerPoint slides and take good class notes.

Policy studies on which this integration and management regime is based, is complex and requires interpretation; these are skills that cannot be acquired in a few hours of last minute cramming just before an exam. Scant successful activity in policy studies is deterministic. Understanding of these materials must be acquired continuously through steady, consistent and progressive exposure over the whole term. The PowerPoint slides available from the course website through Angel are highly abbreviated, condensations used primarily to focus attention and pace our study of the subject. The bulleted phrases of overhead slides are NOT complete thoughts; they do not have the details you need to learn for success in this class. Sole focus on these terse phrases would never be considered sufficient preparation for exams in upper-division courses at top universities like Penn State. Detailed note taking is essential to fill in the many important details and note how the law applies in the examples given in the text and in class. It is impossible to include all such important details on the slides.

General Guidance on Using Assigned Readings:

The pace of reading for each class is sufficient so that you must keep up throughout the course. Careful reading of technical policy texts is the primary technique for policy studies. Keeping up with these readings is mandatory. Policy study is somewhat different than study for the computational or programming disciplines in other IST courses. It necessarily involves considerable, close study of relevant texts including excerpts from primary and secondary materials. Reading and discussion is the predominate pedagogical method making this study much more like the pedagogy used successfully in the humanities and social sciences, language arts, philosophy, applied sociology, history or applied political science. The successful student must recognize these differences and adapt immediately to the greater expectations for preparatory reading and other study. This reminder will be made repeatedly in class. Scant successful activity in policy studies is deterministic as in engineering or the natural sciences.

The readings should not be simply read, they must be prepared. This means the student should read and reason through all the text and readings materials carefully before the class on which they are assigned. It is advisable to highlight or underline key words, definitions and clarifications as you read. Many good students take notes as they read, making summaries in the margins or in a separate notebook. This rewriting and paraphrase is helpful to imprint the knowledge. Highlighting makes it much easier to find these textual references when reviewing for tests and also serves to imprint. There are some parts of the required readings that may not be covered in class but could be examined and some details that may not be covered on an exam.

Please recognize that charts, tables, visuals, concept summaries and indented quoted passages are typically of high importance. The narrative parts of the text introduce, explain and exemplify the concepts that are usually tested most directly. Cases are primarily included to provide real-life examples of the legal concepts. Only through repeated application of policy principles to real-world disputes are the required skills learned. Footnotes and endnotes perform two functions: first they are useful, much more conveniently located bibliographic references to the underlying primary and secondary materials, second, they can provide textual explanation, definitions and context that the author believed was important but chose not to include in the text because it would break up the flow of the readings. The instructor and/or librarians can provide guidance for the effective use of the citations to locate the original source materials for students interested in further study. Many policy materials are readily accessible through electronic open source repositories.

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Pennsylvania State University Policies Applicable to this & All Courses

Academic Integrity:

According to the Penn State Principles and University Code of Conduct:

Academic integrity is a basic guiding principle for all academic activity at Penn State University, allowing the pursuit of scholarly activity in an open, honest, and responsible manner. In accordance with the University's Code of Conduct, you must not engage in or tolerate academic dishonesty. This includes, but is not limited to cheating, plagiarism, fabrication of information or citations, facilitating acts of academic dishonesty by others, 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.

Any violation of academic integrity will be investigated, and where warranted, punitive action will be taken. For every incident when a penalty of any kind is assessed, a report must be filed. This form is used for both undergraduate and graduate courses. This report must be signed by both the instructor and the student, and then submitted to the Senior Associate Dean.

Affirmative Action & Sexual Harassment:

Penn State is committed to a 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 Commonwealth or Federal authorities. Penn State does not discriminate against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, gender, sexual orientation, or veteran status. Direct all inquiries to Affirmative Action Office, 211 Willard.

An Invitation to Students with Learning Disabilities:

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) at 814-863-1807 (V/TTY). For further information regarding ODS, please visit the Office for Disability Services Web site at <http://equity.psu.edu/ods/>.

In order to receive consideration for course accommodations, you must contact ODS and provide documentation (see the documentation guidelines at <http://equity.psu.edu/ods/guidelines/documentation-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.”

Sustainability @ IST:

Penn State has an impressive history of sustainability successes over the past years, and strongly encourages students to become actively engaged in sustainability initiatives. During the course of the semester students will have ample opportunities to become more familiar with some of these initiatives. Ideas and suggestions are welcome. Integration of sustainability into SRA 472 subject matter is encouraged. To learn more, please visit Penn State's portal to energy and environmental sustainability at <http://www.green.psu.edu/students/default.asp>.

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Newspaper-in-Education Program

SRA 472 participates in the Newspaper-in-Education program, implemented locally as Penn State's Newspaper Readership program. Students are encouraged to find stories, editorials and advertisements related to course subject matter, read these items and prepare to discuss them within your groups and during class. Use one or more quality national newspapers of your choice (i.e., New York Times (NYT), Wall Street Journal (WSJ), Washington Post, USA Today) and various regional/local newspapers (Patriot News, Centre Daily Times (CDT), Collegian). You may be notified, from time to time, when required and optional readings from newspapers are posted on or linked from Angel.

Attendance:

The University Faculty Senate Policy is 42-27: [Class Attendance](#) which recognizes that, on occasion, students may opt to miss a class meeting in order to participate in a regularly scheduled university-approved curricular or extracurricular activity, or an absence is experienced due to unavoidable or other legitimate circumstances such as illness, injury, family emergency, or religious observance. Senate Policy 42-27 is implemented as Academic Administrative Policy and Procedure E-11: [Class Attendance](#) E-11 expands on the following summaries of attendance policies. Whenever reasonable, a student should submit a [class absence form](#) a week in advance. Religious observance can be a legitimate reason for an absence under Academic Administrative Policy and Procedure R-4, [Religious Observances](#). Note that only holy days, which occur when Penn State classes are in session are listed, but this is not an exhaustive list of all major holy days in each religious tradition. Student missing a quiz, exam, or homework assignment resulting from a legitimate absence should be provided with a reasonable opportunity to make up missed work. If an instructor believes a requested absence for regularly scheduled events will harm a student scholastically, the instructor should present evidence for necessary action to the head of the department in which the course is offered and inform the assistant/associate dean of the college in which the student is enrolled, or to the Division of Undergraduate Studies if the student is so enrolled.

Course Adding/Dropping

The final date for Regular Drop is September 2; the Regular Add deadline is September 3; Late Drop starts September 3, Late Add starts September 4, Late Drop ends November 13.

What is SRA 472 Integration of Privacy & Security?

Exploration of technological, operational, organizational and regulatory issues related to maintenance of individual privacy, confidentiality of organizations, and information protection. This course is designed to introduce students to the major organizational, technical, operational and regulatory issues in information privacy and security, and to give them experience in performing a privacy analysis, designing privacy-aware applications and developing privacy policy in organizations. Topics covered include: conceptualizations and theories of privacy and security, privacy laws and compliance, building a privacy organizational infrastructure, integrating privacy in the software development process, performing a privacy analysis, privacy issues in outsourcing and cross-border data transfers, integrating privacy into customer relationship management and vendor management, information systems audit and intentional standards on privacy and security. This course will mix technical details, applied value and organizational insights of assuring privacy and security through the use of case studies, real-life problems, hands-on exercises and team projects.