The exam will be divided as follows:

Weight	Description	Chapter	slides
60%	Informational questions (true/false, multiple choice, essay)	Honesty (Textbook, chapter 6)	Slide set 4
		Risk and Liability (Textbook, chapter 7)	Slide set 3
		Intellectual Property (Reference 1, chapter 6)	Slide set 5
		Privacy (Reference 1, chapter 4)	Slide set 6
		Target Company data mining	http://www.mprnews.org/story/2012/03/07/target- data-mining-privacy
		Software Quality (Reference 1, chapter 7)	Slide set 7
		Software disasters (Patriot missile, Therac 25, Ariane 5, Shuttle Simulator)	http://www.ganssle.com/articles/disaster.htm
40%	Case analysis (essay)	Everything we covered	

## Example case questions:

## Question:

Ahmad is the Chief Privacy Officer of a manufacturing company, with sales of more than \$250 million per year, of which almost \$50 million are from online sales. The company's president requested from Ahmad to change the company's website data privacy policy from an opt-in policy to an opt-out policy, and to allow the sale of customer data to other companies. It was

estimated that this change would bring in at least \$5 million per year in added revenue without additional expense.

- 1- How does the change from an opt-in policy to an opt-out policy benefit the company?
- 2- Is the request ethical?
- 3- What course of action should Ahmad take?

## Question:

Linda is a software developer who has recently moved from company X to company Y. She discovered that company Y is infringing on a software patent that company X already owns, but nobody at company X knew about this infringement, and her loyalty now is to her new employer, company Y.

- 1- Give two legal alternatives that company Y can take to correct the situation.
- 2- What course of action should Linda take?

## Question:

You are the project manager in charge of developing a major software release. The release date is just two weeks away, and enthusiasm for the product is extremely high among your customers. The forecasted sales per month are \$25 million; therefore the management is anxious to make the release on time. But you have a couple of problems:

- a- Two key features that were promised to the customers in this release have several bugs that would severely limit the use of these features. You estimate that it would take six weeks to fix these bugs.
- b- The QA team has just uncovered 15 other small bugs in the software. You estimate that it would take six weeks to fix these bugs.

What would you recommend to the management? Give at least three options and the supporting arguments for each one.