1. List the key reasons that have caused software project successes.

* User involvement
* Executive management support
* Clear requirement statements
* Proper planning

1. List the key reasons that have caused software project failures.

* Lack of user input/ involvement
* Incomplete requirements and specifications
* Changing requirements and specifications
* Lack of resources
* Creeping user requirements (not primarily)

1. From the definition of software engineering, list three areas that software engineering must touch on.

* Technical and business processes
* Specific methodologies and techniques
* Product characteristic and metrics

1. List the three strategies cited by the 2004 U.S. General Accounting Office (GAO) report as key to ensuring delivery of successful software.

* Focused attention on the software development environment(s)
* Disciplined development process
* Methodical usage of metrics to gauge cost, schedule, and performance targets

1. When and where was the term software engineering first introduced.

The term software engineering was first introduced in a 1968 North Atlantic Treaty Organization (NATO) conference held in Germany.

1. What are the eight principles for ethics and professional practices in software engineering that are recommended by the IEEE-CS/ACM Version 5.2 joint task force report?

* Software engineers shall act consistently with the public interest
* Software engineers shall act in a manner that is in the best interests of their client and employer, consistent with public interest
* Software engineers shall ensure that their products and related modifications meet the highest professional standards possible
* Software engineers shall maintain integrity and independence in their professional judgement
* Software engineering managers and leaders shall subscribe to and promote an ethical approach to the management of software development and maintenance
* Software engineers shall advance the integrity and reputation of the profession consistent with the public interest
* Software engineers shall be fair to and supportive of their colleagues
* Software engineers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of the profession

1. What is meant by the term *principles of software engineering*?

The rules and assumptions in software engineering derived from extensive observation

1. List the eight basic concepts (Wasserman, 2006) that form the foundation to the software engineering discipline, and next to each concept, indicate which class(es) you have taken or will be taking where each concept is addressed.

* Abstraction (Data structure & algorithm / Full stack we dev/ Design pattern)
* Analysis and design methods and notation (Data structure & algorithm / Android / Design pattern / Software Maintenance)
* User interface prototyping (Full stack web dev/ Agile Methodologies / Capstone 1 & 2)
* Modularity and architecture (Data structure & algorithm / Design patterns)
* Reuse (ALL)
* Life cycle and process (Agile Methodologies / Design pattern / Software Maintenance)
* Metrics (Agile Methodologies / Software Maintenance)
* Tools and integrated environment (Full stack web dev, Android, Design Pattern, Software Maintenance, Capstone 1 & 2)