



- grading
- modules
- calendar
- Q&A
- Introduction into computer security
- Upcoming important dates and action items

## Course orientation

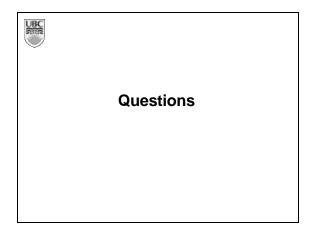
- · What is this course about?
- Where can I find the course syllabus and other stuff?
- What will I learn in the course?
- What do I need to do to pass the course?
- What do I need to do to get 90% in the course?
- How do I contact/see the course staff?
- How can I obtain latest announcements regarding the course?

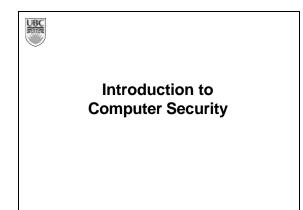
## Course orientation cont-d

- · What background should I have?
- What will I be doing in the course?
  - Term project/paper
  - Home assignments
  - Presentations
    Ouizzes
  - Quizzes
     Mid-term

UBC

- Participation
- Reading
- · What will I be reading?
- What will the course schedule look like?
- · Where can I find additional information resources?
- How can I provide feedback?



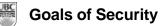




## What is Security?

•security -- "safety, or freedom from worry"

- •How can it be achieved?
  - Make computers too heavy to steal
  - Buy insurance
  - Create redundancy (disaster recovery services)



## Prevention

- Prevent attackers from violating security policy
- Detection

   Detect attackers' violation of security policy
- Recovery
  - Stop attack, assess and repair damage
  - Continue to function correctly even if
  - attack succeeds







# Conventional, fortress-based, security

Goal:

Prevent people from violating system's security policy

#### Means:

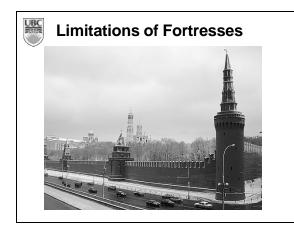
Fortification

- provides safety
- involves layering
- expensive
- requires maintenance
- eventually compromised



#### Some points about fortresses

- · No absolute safety
- · One weakness/error sufficient
- Extra layers → extra cost
- Important to understand threats
- Limited defender's resources
- Need defense plan
- Adjust to attacks
- Resource suppliers
- · Distinguishing noncombatants from attackers
- Containment



## Fortress Analogy Limitations

#### Fortress

- Against external attackers
- Computer security
- Control of insiders
- Protects only insiders
- Defenses cannot change

## Has to keep system usable

 Has to protect from new types of attacks

## Key Points

- Course orientation
  - All the course material is on webCT
  - Start early!
- Introduction into computer security
  - Security == freedom from worry
  - Conventional approach: fortress-like

## Next session preview

Introduction to computer security
 – Security mechanisms & policies