



# Intro to CYBR 3600

**Dr. Hale**

University of Nebraska at Omaha  
Information Security and Policy – Lecture 1

Welcome to CYBR 3600

What is this class?

You will be learning about **risk** and  
how effective **governance** can mitigate  
it through good **policy**.

Introductions

Sounds boring?

Introductions

Its not.

Introductions

~~Its not.~~ Ok, It is a little.

Introductions

But it will build extremely marketable skills.

Introductions

and...You will learn by doing.



You will get to see where policies fail so you can create good ones.

You will see how major corporations  
and the federal government create policies

We will even explore some system assessment and social engineering.

Who am I and why should you trust me?

I'm Dr. Matt Hale.

I'm big into secure web and mobile applications with rich UI and functionality.

Introductions


A few major web applications I've made include..

## SEREBRO

a collaborative online environment that features a set of project management tools and an innovative **idea network** for tracking how ideas evolve over time in software engineering teams.

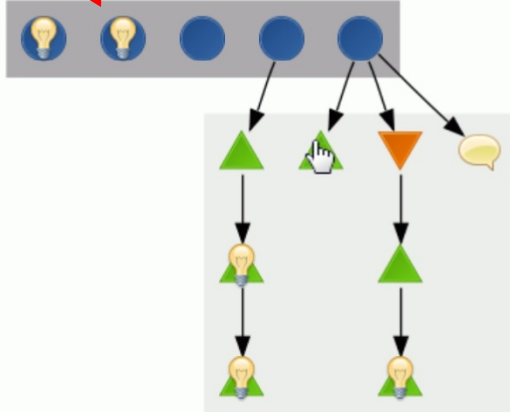
# Idea Network


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[Staff Tools](#)  
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**Topic: Presentation**  
☒ Brainstorm ☐ Toggle Comments





**The vision looks pretty good** ★★★★★

It would also be nice to add that our product will focus on a personalized profile to keep track of which plants the user is interested in growing. I know it is kind of implied in the calendar and notification thing, but it is one of the major advantages our site will have over competitors. Other than that, it looks like a pretty good overview.

**User\_11**  
Amateur  
Reputation: 219

Sep 29, 2010  
11:55 AM

Archive

Tags: document, vision, presentation





## CYBERTRUST

a secure client-side web application that serves as a **simulation platform** for neuroscientists and psychologists to **capture subject data** about **trust cues**. It features data capture techniques like eye and decision tracking.



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<input type="checkbox"/>	Ann Howard	Inventory Control - You are running low on nails. Would you like me to purchase more from the same v...	3:07 pm
<input type="checkbox"/>	PaperMe	Corporate Friend Request - I'd like to invite you to join my social network.-Paul BunyanAccept invitation...	3:07 pm
<input type="checkbox"/>	Your friend	Left your credit card - You left your credit card at Wal-Mart. Go to my website http://helpyouforreal.c...	3:07 pm

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Mutual partners: none

[Business Partner Request](#)

10 9 8 7 6 5 4 3 2 1

[\(Trust, Follow\)](#) [\(Trust, Accept invite\)](#) [Follow](#)[\(Don't trust\)](#) [\(Don't trust\)](#) [Ignore](#)

How trustworthy is this?

© SEAT/Cyb

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<https://www.youtube.com/watch?v=8FMemUIOtfc>

Who am I and why should you trust me?



But...despite being a ‘maker’ my dissertation was all about **policy**, **security controls**, and how they impact systems in the “**cloud**.”



Introductions

We'll probably talk about some of that work later in the class

Some stuff I'm working on now.

Identifying trust cues and predicting  
phishing victimization

Testing and securing wearable devices  
(e.g. fitbit, Jawbone, Nike Fuel)

Enough about me...

Introductions

Who are you?

Name



+

Interesting fact about  
you that not many  
people know  
(NSFW not allowed)

Introductions



Ice breaker activity  
(this class is a no shyness zone)

Introductions

## Some Takeaways

- Stacking cups is hard
- Teamwork is a give and take
- Collective vision is essential for success
- Building Policies based on stakeholder needs and interests isn't all that different.

# Today's topics:

## Introductions

What is this class?

Who am I?

Who are you?

## Class Overview

Syllabus (boring I know)

Topic Roadmap

## What is Governance and why should you care?

Risk

The role of governance

Benefits of good governance

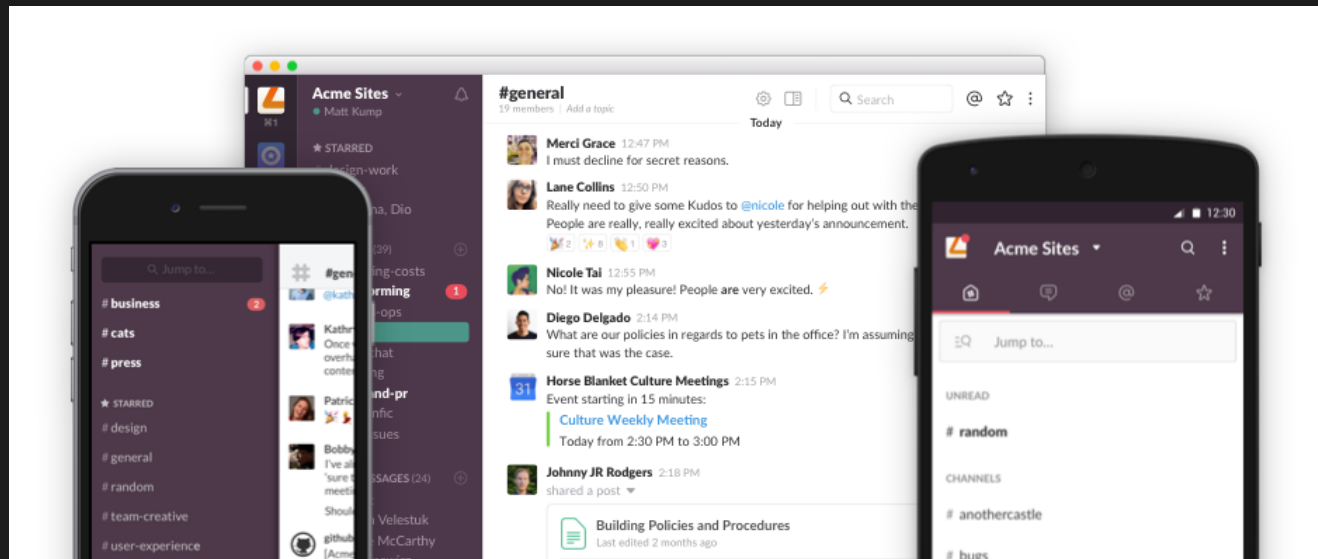
GO TO *Syllabus*

Class Overview

# Topics Covered

- Risk Analysis
- Information Governance
- Security Policies and Procedures
- Regulatory Security Standards and Compliance
- Security Awareness and Training
- Legality and ethics of security practices
- Social Engineering and Phishing Prevention

# What is slack



## Introductions

What is information security governance?

What you get when you google “Governance”

Thanks for nothing wiki...

*“all **processes** of **governing**, whether undertaken by a government, market or network, whether over a family, tribe, formal or informal organization or territory and whether through laws, norms, power or language”*

Risk & Governance



# What **governance** really means

the **mechanisms, processes, rights, responsibilities, policies, decision making, and objective setting** that determine how an entity (e.g., a company) is controlled and directed.

Now apply this definition to information security

What is **information security** governance (ISG)?

a **set of practices** in an organization that align security strategies with business objectives to ensure objectives are achieved, verify that resources are used responsibly, and define responsibility and accountability so that the **organization can achieve an acceptable level of risk**

**Risk & Governance**

# Key elements of ISG

- Defined Organizational structure
- Policies and procedures
- Awareness and training
- Technical Security Controls and countermeasures
- Auditing, Monitoring, and Metrics

## ISG tasks

### Maintain...

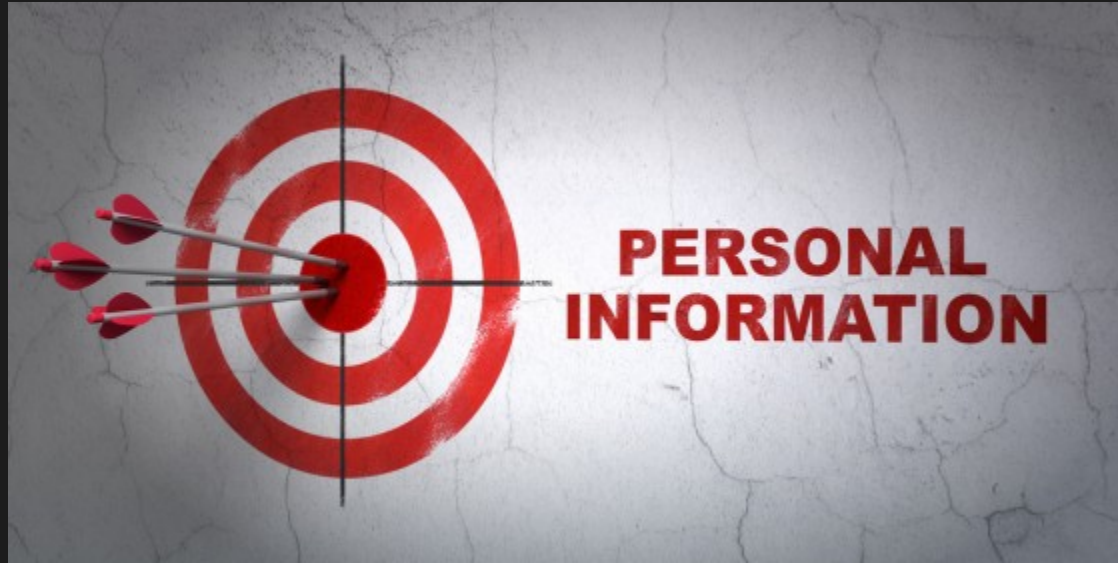
- Confidentiality – Disclose information only to approved entities
- Integrity – No unauthorized modification
- Availability – Information can be accessed by those that need it when they need it
- Nonrepudiation – No one can say that they didn't do something when they did. Provides accountability of actions  
...Across all info., systems, employees, and physical resources in the entire organization

Effective governance prevents or limits...

UN-Happy supreme  
leaders



Risk & Governance



Easy Targets



Risk & Governance

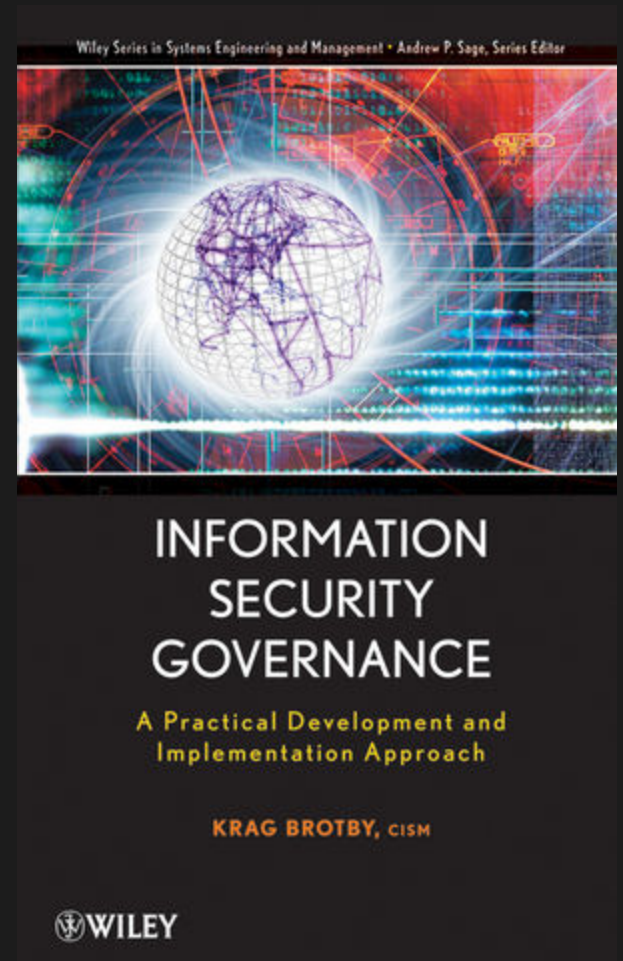


Other data breach puns...

## ...benefits of effective IS governance

- **Strategic Alignment** – security supports business strategy  
Ex. integrity is more important for banks, while availability might be more important for facebook
- **Risk Management** – mitigate or minimize risk by limiting exposure or reducing impact
- **Business process convergence** – increase effectiveness and efficiency through integrating related security activities  
Ex. single sign-on (active directory), ubiquitous auditing, etc
- **Resource and performance management** – understand resource usage for increased efficiency and effectiveness

## Read Ch. 1 in Brotby



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Risks



# Questions?

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