# Topic 1: Thinking

## Ambiguous Situation

Situation with no clear right or wrong, or one in which you perceive no clear right/wrong answer

### Case Study #1: CIA’s Enhanced Interrogation Techniques

* Deontological (rightness/wrongness of actions) vs. utilitarian (end justifies the means)
* Government’s duty to national security vs. prisoners’ rights
* Violation of US/international law
* Lack of transparency
* Lack of adherence to government command

### Case Study #2: Challenger Disaster

* Compromise of safety vs. productivity
* Responsibility of NASA vs. Morton Thiokol
* Whistleblowing and groupthink
* Sufficiency of safety understanding/testing

## Multiple Stakeholders

Parties directly or indirectly affected by your actions/decisions

* **Interdependency**: when party affected by your actions can influence you in return
* **Multiple perspectives**: Stakeholders typically aren’t one-dimensional

### Case Study #1: CIA’s Enhanced Interrogation Techniques

* CIA
* Detainees
* James Elmer Mitchell and John Jessen, who came up with the EITs
* American government, citizens
* United Nations/international community

### Case Study #2: Challenger Disaster

* NASA scientists/managers
* Morton Thiokol engineers/managers
* Astronaut’s families
* American government, citizens

## Ethical Decision

A decision that satisfies multiple stakeholders/perspectives

* Various degrees:
  + Self-serving (one stakeholder)
  + One certain group of people (family, religious group, country, etc.)
* **Most ethical decision**: the one that satisfies the most number of different stakeholders/perspectives

## Models as a Thought Tool

* We form models all the time
* We use a model for each decision that we make
* Well-construed and constantly-reinforced models become reality
  + Can allow for good quick decision-making
  + Present a simplified view of reality, but specific details are absent
  + Models that don’t represent reality well can be a problem
* “The map is not the territory” – an abstraction can’t capture all aspects of its source

## Identity

**Intrinsic fears:**

* Poverty
* Criticism
* Illness
* Loss of love
* Old age
* Death

**Intrinsic motivations:**

* Freedom
* Uniqueness
* Curiosity
* Gregariousness (Friendliness)
* Love/giving
* Variety

# Topic 2: Patterns

## Master Patterns

Learned/inherited patterns that typically run in the background – a form of autopilot

* We run on these patterns unless we’re fully aware/present

### Child Pattern

Strongly engrained because you are born into it – first state of consciousness

* Linked to innocence
* Defines perception of life, safety, nurturing, family, and loyalty

Ideal maturation process:

Childhood 🡪 Age of reason 🡪 Adolescence 🡪 Adulthood 🡪 Responsible adult

* Different patterns arise from deficiencies during stages:
  + **Orphan child**: sense of not belonging in family
  + **Wounded child**: memories of childhood trauma/injustice
  + **Innocent child**: limited view – always happy or always miserable
  + **Eternal child**: can’t grow up

### Victim Pattern

Allow ourselves to be victimized, through passivity (“it’s not my fault”), self-pity, or blaming others for circumstances of our lives

* Linked to self-esteem
* Typically manifests when you don’t get something you want
* Trade off personal power for responsibility of your actions
* When faced with conflict, do you represent your perspective truthfully or run?
* Recognizing this pattern can help with self-empowerment

### Prostitute Pattern

Sale/negotiation of one’s integrity due to fear of physical survival or for financial gain – “what is your price?”

* Linked to faith/self-respect
* Selling out our power, talents, ideas
* Inability to leave a personal/professional relationship due to feeling physical or economic survival will be threatened
* Taking shortcuts
  + Name dropping
  + Need for control
  + Seduction/manipulation

### Saboteur Pattern

Ways in which we undermine ourselves – self-sabotage

* Linked to choice/betrayal
* Making choices to maintain a status quo, blocking own empowerment/success
* Fear of change when making a choice to pursue a growth opportunity

# Man’s Search for Meaning / All Quiet on the Western Front

## Child Pattern

### Wounded Child

* **Prisoners who watched others get tortured with apathy**: after witnessing so much abuse and suffering in the camps, they could no longer muster disgust, horror, or pity
* **Paul Braumer**: due to the despair and trauma that he faces at the warfront, Paul learns to disconnect his feelings in order to maintain sanity and survive

### Orphan Child

* **Paul Braumer**: Paul feels cut off from humanity – the war has stolen his generation’s youth and they have nothing to return to once the war ends

### Innocent Child

* **“Delusion of reprieve”**: when they first arrived at Auschwitz, seeing well-fed prisoners, they believed that they might be reprieved at the last moment and everything would be well
* **Prisoners who asked if they could keep belongings**: they had optimism that the SS guards would let them keep some valuable possessions, not yet realizing they were about to lose everything
* **Frankl trying to keep his manuscript**: he thought explaining to the prisoner would gain his sympathy, but instead he lost his identity
* **The hospital patient**: when Paul and Albert are taken to a hospital, one patient gets taken to the “Dying Room” but he maintains the optimistic belief that he’ll come back; indeed, he managed to survive and come back

## Victim Pattern

* **Prisoners who watched others get tortured with apathy**: after witnessing constant abuse and suffering in the camps, they didn’t do anything because they figured it wasn’t their fault
* **The civilians after the war ended:** they didn’t care about the prisoners’ ordeals, thinking it wasn’t their fault and that they had suffered through the war too
* **Paul’s friends**: the ones who despised their teacher Kantorek for persuading them to enlist in the army
* **Muller taking Kemmerich’s shoes**: he reasoned that “it’s not my fault” Kemmerich is dying, didn’t want the shoes to go to waste

## Prostitute Pattern

* **Capos**: they sold themselves out to be hard on other prisoners, in order to maintain their own survival in the camps
* **Prisoners who arranged others to take their place in transports**: they sold their morals in order to preserve their own lives, through willingly putting other people in their place on transports
* **Russian POWs:** they tried to sell whatever they had in order to survive, including their pride in order to dig through the garbage cans of the German camp for food
* **Himmelstoss:** he sold his power of being a Corporal to become a cook once he was sent to the front, in order to save himself

## Saboteur Pattern

* **SS commander who bought medicine for prisoners**: he took pity on them rather than the status quo, which was to punish them
* **Men who gave away their last pieces of bread to others:** self-sabotaged in order to benefit/comfort others
* **Frankl decided to leave on the transport instead of having his name crossed off the list:** to be with his colleagues, he self-sabotaged himself
* **Frankl decides to stay with his patients instead of escaping with his comrade**
* **Katczinsky risks his own life to scavenge for food:** he puts his own life in danger in order to make everyone else’s a bit better through finding them food

**Challenges faced by prisoners after release**:

* Moral deformity: Prisoners became instigators of injustice, justifying their actions based on what had happened to them
* Bitterness: Prisoners questioned why they’d gone through all that they had – no one in the outside world really cared
* Disillusionment: Prisoners felt as if they had reached the limits of suffering, only to discover it was possible to suffer more, e.g. when a prisoner discovered that his entire family had perished, the people who got him through were gone

# Topic 3: Engineering Profession

## Why do Engineers have Power?

* They have specialized knowledge
* Organized application of specialized knowledge is very powerful
* People with specialized knowledge are more prepared for making important decisions
  + With individual power comes personal responsibility

## Iron Ring

* Symbolic – worn on the working hand
* Reminder of Engineers’ oath to protect the public

## Why does the PEO exist?

* Holds people accountable in shared decision-making
* Lobbies for necessary new legislation
  + E.g. **Bre-X Minerals gold fraud scandal**: catalyst for licensing of geologists in Canada
* Enforcement – takes legal action against unauthorized people practicing engineering
* Protects the engineer’s identity
  + E.g. **Microsoft Certified Software Engineer (MCSE)**: Microsoft introduced this term for people who were certified on Windows systems; PEO determined this violated licensing laws

## Quebec Bridge

* Was supposed to be the longest bridge in the world, at 550 metres
* Collapsed in the midst of construction in 1916
* American engineer Theodore Cooper was chosen to design it
  + Chose “best and cheapest plan”; didn’t like when a Canadian engineer criticized his design for high stresses
  + Cooper refused to supervise construction
  + Edward Hoare was selected as Chief Engineer; he’d never worked on a bridge over 300 feet long
* Who was at fault?
  + More often than not, faulty processes are at the heart of engineering disasters
  + Every engineer only plays a role in a system

# Topic 4: Duty

## Code of Ethics

It is the duty of the practitioner to the public, employer, clients, and other members of the profession, to act with:

* Fairness and loyalty to associates and clients
* Fidelity to public needs
* Personal honour and professional integrity
* Sufficient knowledge of areas relevant to undertaken services
* Competence in performance

## What should Engineers do?

* Regard duty to public welfare as paramount
* Enhance public regard for professional engineering by extending public knowledge
* Only express opinions on professional engineering matters founded on adequate knowledge and honesty
* Keep license/certificate of authorization permanently displayed in place of business

## Blind Devotion vs. Question Everything

* **Blind devotion**: no point to ethics, as engineers will always take same side
* **Question everything**: whistle-blowing becomes the norm; businesses will falter
* “The most that can be expected of [engineers] is an exercise in reasonable care and prudence”
  + **Reasonable care**: all that you can possibly do, satisfying legal obligations

## Labour Unions

* Engineers are allowed to join labour unions
* However, they must uphold their professional obligations, regardless of conditions/negotiations

## Conflict of Interest

A situation that may undermine a person’s obligations, due to clash between self-interest and public or professional interest

* Direct vs. perceived – both are dangerous
* Engineers are required to declare both types to their clients

# Topic 5: Group Decisions

## Mann Gulch Fire

* A wildfire that occurred in Montana in 1949
* A team of 15 smokejumpers, led by foreman Wag Dodge, went to go put out the fire
* 12 firefighters died; Wag Dodge walked away untouched
  + Wag Dodge tried to direct them into center of his “escape fire”, but they didn’t listen to him

## Group Decision-Making

Common problems:

* Pressure for conformity
* Formation of opposing sub-groups
* Free-loaders
* Information filtering

## Groupthink

The pressure of conformity in a group results in irrational decision-making

**Symptoms**:

* Group believes it is invulnerable
* Ignores warnings
* Rationalizes disconfirming data
* Group feels on higher moral ground than rivals
* Stereotypes/demonizes opponents (give them separate identity)
* Majority pressures minority into submission
  + People self-censor due to fear of challenging the majority
  + Group comes to conclusion that everyone has unanimous view

**Outcomes**:

* Confirmation bias
* Few opinions/alternatives are discussed
* Risk is not considered
* Previously dismissed options aren’t reconsidered
* Group doesn’t seek unbiased outside opinion
* No contingencies are discussed

### Bay of Pigs Invasion

* After Fidel Castro overthrew General Bautista to take power in Cuba, American government planned an invasion of Cuba with American-trained Cubans
* Plan failed miserably and Americans surrendered in under 24 hours
* The flawed decision of President Kennedy and his advisors to authorize the Bay of Pigs invasion of Cuba is an example of groupthink
  + The drive for consensus among Kennedy's advisors was believed to have prevented crucial information from being discussed, and has been blamed for the invasion's failure

### Cuban Missile Crisis

* CIA favoured airstrikes on Cuba, but Kennedy held fast to a naval blockade, resulting in a peaceful conclusion to the missile crisis

## Deciding How to Decide

* Who should be involved in decision-making process?
* What environment does decision take place?
* How do people engage in communication?
* How will leader control process and decision contents?

# Topic 6: Challenger Case Study

## High Stakes Environment

* All participants were aware of public pressure
  + Space program was public symbol of US success/progress
  + US competing with Russians – wanted to be first to send teacher in space
* Challenger had already had multiple delays in launching

## Stakeholder Goals and Interests

* Morton Thiokol: contractor for O-ring
  + Engineers questioned launch conditions but managers went ahead and signed recommendation of launch anyway
* NASA
  + Contract said in case of rocket failure, MT must accept all legal liability – NASA was not liable
  + Launch the space shuttle – already too many delays
* Individuals:
  + **Larry Mulloy (NASA official)**
    - "My God, Thiokol, when do you want me to launch, next April?"
    - Very against idea of postponing launch yet again
  + **Roger Boisjoly (MT engineer)**
    - Tried very hard to convince NASA that it was unsafe to launch at such low temperatures
  + **Bob Lund (MT manager)**
    - Overruled (along with other MT officials) engineers’ warnings and gave go-ahead for launch

## Data

* There wasn’t enough data to suggest correlation between low temperatures and O-ring failure; Boisjoly wasn’t able to convince NASA scientists/managers
* Additional, clearer data was available, but no one looked past confirmation bias to request it
* Instead of “don’t launch unless proven safe”, it was more “launch unless proven unsafe”

## Advocacy vs. Inquiry

|  |  |  |
| --- | --- | --- |
|  | **Advocacy** | **Inquiry** |
| **Each person’s job** | Forcefully advocate your role | Present your POV as partial; inquire about other perspectives |
| **Unstated rules** | Aim to convert other people to your perspective | Aim to collectively arrive at best conclusion |
| **View of others** | Competitors | Collaborators |
| **Dealing with gaps in logic** | Hide them | Reveal them |
| **Response to dissent** | Crush it | Seek it |

### Promoting Inquiry

* Set the orientation to be towards a group learning experience
  + Build psychologically safe environment so people aren’t afraid to speak up
* Lead discussion
  + State your views with explicit reasoning
  + Seek input from everyone
  + Understand, don’t defend other perspectives
  + Be aware of biases, patterns, and triggers
* Review process for improvements

## Man Made Disasters

* Barry Turner’s book claims that catastrophic failures are incubated for years, not hours
* Fundamental flaw lies in the process

## Normalization of Deviance

* Diane Vaughan coined the term, in relation to the Challenger disaster
* “Slippery slope theory” – repeated occurrences of anomalies become treated as expected, then accepted
  + Initially, NASA didn’t predict O-ring erosion
  + When failure first discovered, treated as anomaly
  + Repeated occurrences made it become expected – small deviations taken for granted
* NASA culture also shaped normalization of deviance over time
  + Tight schedule pressures
  + Engineers separated from managers
  + Space flights perceived as routine
* After Columbia disaster in 2003, investigation discovered that cultural problems identified by Vaughan still existed in 2003
* NASA never contacted Vaughan to discuss her findings

# Topic 7: History of Law

## Common vs. Civil Law

**Civil law**: codified law with detailed statutes (“rules”) that must be adhered to

* Judges and lawyers must study all statutes in detail
* Not very flexible – outcome is more predictable

**Common law**: cases are decided based on individual circumstances

* Rule of precedence
* Judges and lawyers must be more skilled at arguing their case
* More flexible – greater freedom of interpretation

Three sources of new laws:

* Executive: cabinet, limited power
* Legislative: Parliament can pass laws through acts of Parliament
* Judicial: execute precedence and interpretation of laws

## History of Law in Canada

* Based on Westminster Model: Executive, Legislative, Judiciary
* Power divided between federal and provincial in British North America Act of 1867
  + First 4 provinces: Ontario, Quebec, New Brunswick, Nova Scotia
  + Governor General: represents the Queen at a national level
  + Lieutenant Governors: represents the Queen at a provincial level

## Federal Powers

* Trade/commerce
* Banking
* Weights/measurements
* Bankruptcy
* Copyrights and patents
* Criminal law

## Provincial Powers

Constitution: “generally all matters of a merely local or private nature in the province” are within the power of the provincial governments – this is up to interpretation by Supreme Court, to set precedence for the future

* Municipal institutions
* Provincial incorporations
* Provincial property rights
* Administration of justice within province
* Local work

## Legislative Branch

* **Federal**: House of Commons + Senate
* **Provincial**: legislative assembly
* Both can pass statute laws through acts of Parliament
  + Federal: must be approved by Governor General
  + Provincial: must be approved by Lieutenant Governor

## Executive Branch

* Cabinet with ministers led by Prime Minister, controlled by party with most elected seats in House of Common
* Can enact legislation through orders-in-council, regulation, and code
* Executive branch must have confidence of parliament

## Judicial Branch

* Federal, provincial, and military courts 🡪 Court of Appeal 🡪 Supreme Court of Canada
  + Precedence is important in Supreme Court decisions

## Power to Delegate

* Federal and provincial governments can delegate authority to other bodies
  + E.g. Municipalities manage property tax, etc.
  + E.g. Ontario delegates regulation of engineering to PEO through the Professional Engineers Act
* **Self-regulation**: regulation of an organization that is independent of governments

## Constitution Act of 1892

The Constitution of Canada is the supreme law of Canada; any law that is inconsistent with provisions in the Constitution has no effect

## Charter of Rights and Freedoms

* Guarantees rights and freedoms, subject only to limits of laws
* **Fundamental freedoms:**
  + Conscience and religion
  + Thought, belief, opinion, and expression (e.g. freedom of press and media)
  + Peaceful assembly (right to collective express, promote, and defend ideas)
  + Association (right to join/leave groups)
    - Federal Bill C-95 National Anti-Gang Measures was challenged under the Charter
    - Grim Reapers Motorcycle Club in Alberta won against Alberta gang roadside checks in 1997 – judge ruled police violated constitutional rights
* Equality rights
  + Everyone is equal under the law, without discrimination based on race, gender, age, etc.
  + Do not preclude any law, program, or activity aimed at improving conditions of disadvantaged groups

### Vriend vs. Alberta

* Alberta’s provincial *Individual Rights Protection Act* didn’t include sexual orientation
* Vriend, a teacher, was fired because of his sexual orientation; he wasn’t able to file a complaint under the *Individual Rights Protection Act* because it didn’t prohibit discrimination due to sexual orientation
* The case was brought before Supreme Court, which ruled that the exclusion of sexual orientation resulted in denial of equal protection under the law, and that it should be added into the provincial legislation
* Significance: determined that omission from Charter can be a violation, and that LGBT persons were protected under the Charter

# Topic 8: Contracts

## Contracts

* Foundational element of the Rule of Law
* Enables trust and productivity
* Interlinked with correct working of democracy, market economy (capitalism), and civil society (non-government institutions)

1. **An offer is made**

* Clear and unambiguous promise made by one party to another
* Time limit
* Offer can be revoked after acceptance

1. **The offer is accepted**

* Clear and unambiguous acceptance
* Doing nothing isn’t legal acceptance
* Acceptance isn’t in effect until it is communicated to offeror

1. **Consideration**

* Right/benefit/profit for the promiser
* Forbearance/detriment/loss suffered by promisee
* Consideration must be of real value (but doesn’t have to be money)
* Gratuitous promise: a promise/offer that is made without consideration; the offeror may be bound morally to fulfill the promise, but they are not bound legally

1. **Legal intention**

* Law presumes there is legal intention in a contract involving strangers
* Non arm-length transaction – contract between family members may not be as bound

1. **Capacity**

* Void contracts are legally deemed not to have existed
* Voidable contracts exist until rejected by one party
* Illegal contracts are always void

1. **Legal Objects**

* Other contracts can be illegal and void, if they are deemed unconstitutional or infringes on Charter of Rights and Freedoms

1. **Genuine Consent**

* If one party makes a misrepresentation or if the contract contains an inherent mistake, contract may still not be binding
* Helps ensure contract is one you genuinely consented to

## Irrevocable Offers

* Typically occurs during tendering (contractors bidding on a contract)
* Offeree wants to ensure offer can’t be revoked by offeror before they can accept
* Specified in contract

## Option Contracts

* Give the right to accept an offer
* Something of value must be exchanged for option

## Mistakes

* Innocent: contract is rescinded
* Fraudulent: deceived party can rescind contract and claim compensation/damages for deceit
* **Imperial Glass vs Consolidated Supplies (1960)**
  + Contractor used wrong figure in calculating price
  + Other party was aware of the mistake but didn’t say anything
  + Contractor tried to get out of contract, but judge ruled against it
* **Belle River vs. Kaufmann (1977)**
  + Contractor used wrong figure in tender
  + Made other party aware of mistake and tried to change tender before deadline
  + Other party refused to let contractor withdraw the offer, tried to accept the offer, then accepted another offer and sued the contractor for the difference
  + Court favoured the contractor
    - Established a precedent: a party cannot accept an offer that he knows has been made by mistake and that affects a fundamental term of the contract
* **Ron Engineering (1979)**
  + Bid deposit of $150,000 was paid with tender
  + Tender bid contained genuine mistake (similar to Belle River)
  + Ron Engineering tried unsuccessfully to contact the other party before tender opened
  + Ontario trial judge favoured other party (i.e. cheque shouldn’t be returned)
  + Appeals court overturned decision based on Bell River precedent
  + Supreme court overturned the Appeal
    - Declared there are two contracts:
      * Contract A: tender agreement
      * Contract B: actual contract
      * Mistake had to do with Contract B, not Contract A, and wasn’t communicated at time of tender, so Belle River doesn’t apply
    - Established precedent of two contracts – 1 x Contract A and number of bidding contractors x Contract B
* **Bruinsma vs Chatham**
  + Multiple contractors made tender bids
  + Owner deleted an item from tender package, changing the lowest bidder
  + Court ruled that tender agreement doesn’t permit Chatham to delete items from tender; must accept/reject tender as submitted
* Contra Proferentem: if a contract is ambiguous, it will be interpreted against the party who drafted it
* Parol Evidence: prevents oral contracts from superseding written contracts – in general, written contracts always have priority
* Bid Shopping: when the contract owner accepts a bid with no desire of into a contract with that party; only uses it to lower the tender of another party

## Discharge of Contract

* End of contract
  + Contract is completed
  + Mutual agreement to discharge
  + Agreement in contract is met (e.g. non-payment of rent)
  + Frustration – conditions change such that fulfilling contract is unreasonable
* **Force Majeure clause:** frees both parties from a contract’s liability, in extraordinary circumstances such as war, riot, insurrection, flood, labour dispute, etc.

## Breach

* One side fails to perform obligations outlined in the contract
* Innocent party is entitled to certain damages/discharge to remedy the breach
* Breach doesn’t mean automatic discharge

## Damages

* Direct: e.g. something was broken
  + Usually clause in contracts will limit responsibility to direct damages
* Indirect: e.g. time was wasted

## Quantum Meruit

* Services requested + performed without any legal agreement for payment
* Courts will award payment “as much as is reasonably deserved”

## Injunction

* Court-issued desist that requires a business to stop doing something (e.g. selling a product) because of a contract breach
* Example: court can order a business to stop operating if it violates a non-compete clause

## Fundamental Breach

* When a service/equipment provided is unsuitable
* A breach that is so fundamental, it allows the affected party to terminate the contract and be liable for damages (direct or indirect) even if clause exists in contract to limit liability

## Blizzard vs. BnetD.org

* Waterloo engineers got sued for reverse engineering a private server where users could play Blizzard games for free
* Blizzard won, since the engineers had agreed to an electronic contract (End User License Agreement), which they breached when they reverse engineered content – expressly forbidden in EULA
* Also, engineers violated DMCA anti-circumvention and anti-trafficking provisions

# Topic 9: Torts

* Harm committed by one entity against another
* Harmed entity is entitled to compensation
* Tortfeasor (the one committing the tort) and victim
* **Intentional**:
  + Nuisance – person has right to enjoy his/her real property
  + Defamation – libel, slander, and other damage to reputation
  + Fraud – criminal deception to acquire entities
  + Assault, battery, trespass, etc.
* **Unintentional:**
  + Negligence – conduct that falls below the standards of behaviour established by law for the protection of others against unreasonable risk of harm; departure from conduct of a reasonably prudent person acting under similar circumstances
* **Reasonable person**
  + Objective over which conduct is judged
  + Composite of the community’s judgement

## Important Factors

* **Knowledge, experience, and perception**
* **Special skills**
  + E.g. driving, flying, etc.
  + Compared to a reasonably skilled, competent, and experienced person in the field
  + No allowance for beginners
* **Physical characteristics** 
  + Medical conditions, illnesses, etc.
* **Mental capacity**
* **Children**
  + Usually presumed incapable of negligence between 7-14
  + Exception: when engaging in adult activities
* **Emergencies**
  + E.g. homeowner – someone’s child drowns at a pool party
  + Snail in beer bottle case
    - In the absence of a contract, compensation could still be claimed
* **Conduct of others**
  + Reasonable person will take into account the conduct of others and regulate their own conduct accordingly
  + Should foresee unlawful/negligent conduct of others if the situation warrants it
  + E.g. leaving a car unlocked with keys in the ignition near a high school
  + E.g. driving in a school zone and hit a child

## Unintentional Torts

* **Conditions for Negligence**
  1. Defendant owes duty of care to plaintiff
  2. Defendant breaches duty of care
  3. Breach of duty caused injury to plaintiff

## Duty of care

* **Standard**
  + Responsible “if he does or omits to do his professional undertaking with an ordinary and reasonable degree of care and skill”
  + Engineer doesn’t need to exercise an extraordinary degree of skill – question of whether there has been a want of competent care and skill
* **Conditions**
  + Expert or professional advisor
  + Has the requisite skill/knowledge to give information
  + Is aware that enquirer intends to act on the advice
* **Negligent Misstatement**
  + Party A carelessly makes a statement to Party B, where the parties have a relationship where Party A owes Party B duty of care
  + Hedley Byrne vs Heller
    - Hedley Byrne asked Heller for advice regarding a customer; Heller replied “without responsibility on the part of this bank”, that he is good for business engagements
    - Subsequently, Hedley Byrne lost money and sued Heller for negligence
    - Judge ruled that a professional providing a service, with or without a contract, has a duty of care to the other party
    - Shift from “buyer beware” to “seller beware”
* **Occupier’s Liability** 
  + Owner of estate is responsible for health/safety of anyone who enters the property, legally or illegally
  + E.g. you are liable if someone slips on your sidewalk, or a trespasser gets caught in a booby trap in your house
    - Could be an emergency first responder
* **Concurrent Liability**
  + Breach of contract and tort (simultaneously)
  + With tort, damages aren’t limited as they can be in a contract
* **Limitations on Liability** 
  + Time limitation: 15 years maximum for discoverability
  + Disclaimers are critical
* **P. Eng. Negligence**
  + Even if you are found to be non-negligent in a court of law, PEO can still find you guilty of negligence and strip away your engineering license

# Topic 10: Intellectual Property

Who owns an idea?

* Copyrights, patents, etc. protect implementations of ideas, not ideas themselves
* Governments provide these rights to motivate new ideas, in exchange for full transparency
  + You don’t own the idea – society does
  + After patent expires, idea becomes public domain

## IP and Law

* **First to invent**
  + If one can prove that they were the first one to come up with an idea, they can gain rights to it
  + Large companies can invent lots of things without patenting them, and then file when someone else tries to
* **First to file**
  + First to file a patent is the one who has rights to it
  + Companies can file many patents without intending on using them

## Patent Infringement

* Example: company patents a headband for a digital watch
  + Company who patents could potentially prevent maker of watch from creating a similar product
  + May not be able to sell the product without consent from watch maker
  + Could be sued in civil lawsuit for patent infringement

## Utility Patents

* Protects new and useful inventions (devices or processes)
* Protection lasts for 20 years
* Only the original inventor (individual) can apply for patent protection
* Three conditions:
  + **Novel**: must be something new
  + **Useful**: has to be useful
  + **Nonobvious**: scope of patent must be limited such that within the scope, it is novel (hasn’t been seen before)
* Protects function – longer process, but can protect multiple versions of product with one patent
* 20-year protection

## Design Patents

* Three conditions:
  + **Novel**
  + **Nonobvious**
  + **Ornamental**
* Protects appearance – shorter process, usually only protects one version
* 14-year protection

## Trade Secrets

* Unlike patents, trade secrets aren’t in the public domain
* Still has to prove the three conditions (novel, useful, nonobvious)
* Patents prevent others from using a piece of knowledge, even if acquired independently
* Trade secrets prevent others from taking knowledge unlawfully from only you
  + If others figure it out on their own, there is no recourse
  + Trade secrets can die with their owner
* **Defensive patents**: patents that are used to defend companies against patent infringement

## Confidential Business Information

* Less secretive compared to trade secrets
* **Non-disclosure agreement**: information disclosed in confidence, with understanding that the information is confidential
  + Contractual obligation
  + Even if the information is public, if the receiver gains value from confidential disclosure then they can be liable for unjust enrichment claims

## Copyrights

* Automatic protection of works for artists and authors; gives them sole right to print, copy, sell, distribute work
* Protection granted for life of author + 50 years
* Physical works (e.g. books, musical/dramatic compositions, maps, paintings, sound recordings, movies) are copyrighted

## Trademarks

* Name/symbol to distinguish individual products from others
* Service mark: mark used to distinguish a service
* Must be continually used in order to protect them

## Employee Rights

* Balance between rights of corporation and rights of individual
* Overly restrictive agreements can be thrown out of court