Work Force-Syllabus

Title	World Problem Activity
Description	Training pre-employment individuals for joining the workforce with needed life-skills
LEARNING OUTCOMES / OBJECTIVES	• Life- long learner skills • Join the work force with a positive attitude and engineering mind-set.
Weekly Schedule	4 weeks; 5 days/week; 7 hours/day = 140 hours
Course Rubrics	Standards, learning targets Three areas of learning targets • Knowledge … Content • Skills … Processes, trainability assessment • Reasoning … Thinking skills, character development
Course Expectations	Students will develop skills to be part of a work-force with a positive attitude of seeing problems as opportunities creating a joyful work environment
What Is a work force centric culture?	• Seeing the work environment as a place to learn • Grow professional as if you're in your own business
Classes	

Week 1 *Introduction/ Course objectives* *Problems as opportunities*	Day	Learning
	1	Intro, Ice breakers, My likes(what interests me)
	2	Building a team, culture, values
	3	Role playing, Improv
	4	Mapping our learning, mindset
	5	Connect to a work organization

Week 2 • *Study project: Trip to the mall*	Day	Learning
	1	Work place problem to solve
	2	Research problem

Project Academy

Work Force-Syllabus

to observe retail work force *Selecting a problem, Team rules*	3	Field trip
	4	Problem activity
	5	Problem solving
	• Discussion web tools; problem solving Process • Collaboration 6 hats • Engr. Is everywhere	

Week 3 Study project: *Trip to the Waltham manuf. Museum*	**Day**	**Learning**
	1	Testing, Reflection
	2	Elevator pitch
	3	Field trip
	4	Branding
	5	Work environment, customer, processes, metrics

Week 4 *Trip to the Framingham hospital*	**Day**	**Learning**
	1	Work environment, planning
	2	Social & Emotional learning
	3	Field trip
	4	Character development
	5	Celebration …. Presentation

Take away

- Acquire self-awareness and apply self-management skills to achieve personal well-being and effectiveness
- Act with integrity and make responsible decisions that uphold moral principles
- Acquire social awareness and apply interpersonal skills to build and maintain positive relationships based on mutual respect
- Be resilient and have the ability to turn challenges into opportunities

Project Academy

Work Force-Syllabus

Module	Description	Learning Objectives Students will be able to	Behavioral Goals
Introduction	Students will form groups and do an ice-breaker exercise & discuss what they learned & observed	• Understand goals of the course • Begin to see the benefits of working together	Students will demonstrate a positive attitude about team-work
Team format	Though a series of activities students will develop a team charter and learn various life-skills for working together Teams will compete in various games & Improv activities.	• Understand to similarities of a learning team to a sports team • Relate the team to a community organization	• Students will be able to work together and deal with issues in a positive manner • Interpersonal skills will be practiced
Problem selection	Discussion of community, school & world issues to work on as teams	Setting ground rules for the task	Begin the understanding of the Engineering mind-set
Problem solving	Students learn the problem-solving process and implement it working as a team. Skills are practiced doing this activity	• Students use on-learning learning tutorials. • Students can understand thinking skills, problem solving and decision making	• Students will understand that all problems as opportunities • Students will see learning as a fun activity
Testing	Questioning and finding feedback on the teams work. Listening to the community	Ability to use feedback and iterate to find details of what has been accomplished	• Learning that failure is a method to get better at what you are doing • Be able to communicate with others to gather feedback
Public Reporting	Prepare results of this activity through creating documents & charts about what has be learned	Gather thoughts and share results with the community organizations	• Learning to develop conclusions of the teams activity and create what's next for the project • Students will demonstrate the use of life-skills moving forward
Tying into the work environment	Visit & discuss what the needs of companies are. Obligation to you?	Students will understand their pluses & minus. Why you need to think of your self as in your own business.	• Branding • Operating your business, its needs

Project Academy

Work Force-Syllabus

Overview
Need to think of the details that should accompany the project regarding the life-skill learning.

How are the Life Skills integrated into the project?

Essential Questions
1. How do we insure that the students pick up and embrace the life-skills that are part of the project?
2. What does cognitively and repetitive mean in learning life-skills.
3. Do we just pick a few ones before the project starts?

<mark>Students must be cognitively aware of skills they are using</mark>

In problem-based learning, beside solving the world problem, "learning along the way" is also a goal of the work. Students must be cognitively aware of skills they are using.

Tasks

How do we re-enforce the learning of these skills?... Writing in a book, creating a poster, team play about the skill?

Prioritize the life-skills into musts and wants, put them in categories (business, society, personal),

Get students to Collaboration on their learning life skills

"well-being can be considered a life skill. If you practice, you can actually get better at it." By learning and regularly practicing skills that promote positive emotions, you can become a happier and healthier person. *Jane Brody*

Personal/ Social Development:

Ethical decision making	Civic engagement	Planning/ Goal-setting
Self-control	Character traits	Social intelligence
Values /community	Team work	

Skills related to the process:

Problem solving	Financial literacy	Time management
Thinking skills	Character traits	Self-control/ Values
Collaboration & Teams	Continuous improvement/ Quality	Process methods
Measurements/ Feedback	Planning	Risk taking/Stretch goals
Learning from failure	Entrepreneurship	Innovation
Study skills	Decision making	Negotiation
Social intelligence	Team work	Organization culture
Listening Skills	Nonverbal communications	

Project Academy

Work Force-Syllabus

Elements of Engineering mind-set

Culture:
- Values/ norms/ communities
- Negotiation
- Decision making
- Collaboration
- Excellence

Project Formation:
- Creative and Critical thinking
- System view
- Questioning
- Customer needs
- Financial controls

Planning and Scheduling
- Time management
- Measurements/ Feedback
- Quality systems

Problem Solving / Process
- Innovation
- Risk taking
- Prototyping and iteration
- Entrepreneurship

Public reporting
- Reflection
- Testing idea
- Presenting

Attitude
- Positive
- Flexible
- Doing your best
- Being a leader when necessary

All parts of the process

Process	Skills
Ice breaker/ Intro.	Greeting skills, Eye contact, non-verbal skills
Forming the team	Diversity, Values of a culture, Time management Listening skills, Collaboration Character development
Picking the project	Team work, Handling adversity Project planning, Scheduling
Problem solving	Thinking skills. Self-reflection Problem-solving structure Decision making, Sorting
Testing & writing	Feedback, Iterations, Communication (without phones) Elevator pitch,
Public dialogue/ Celebration	Metacognition, Presentation skills,

Project Academy