Colonists

# Depended mods

# Population

* Clone duplicator
* Communications dish
* Landingsite
* Reproduction
* Ambulance, radar, automatic

# Housing

* Houses
* Shops
  + These automatically put food in houses
  + ( restaurants )
* Pick up solid waste

# Work

* Manned inserter
* Mining drills ( Mining drones )
* Manned assembly machine
* Manned lab
* Manned reverse factory

# Workshops

# Heat

* Heat generator
* Heat electric generator
* Generator
* > Steam exchanger
* > Heat to lower heat exchanger

# Food

# Waste

# Happiness

* > Hospitals?
* > Bars

# Maintenance

# Military

# Transport

* Transport drones
* Transport trucks

All

* Balance
  + Power
  + Health
  + Recipe
  + Pollution
* Images
  + Pictures
  + Tints
* Sounds
* Technology tree
  + Disable recipes
* Start
  + 20 Colonists
  + 100 Food rations
* Levels
  + 1
    - Colonist per building
    - Buldings need heat
    - Colonists need food
    - Housing
    - Apples and oranges as food
  + 2
    - Jobs as modules
  + 3
    - Offices as Beamer
* Hunger state
  + 1 Rampaging mobs appear
  + 2 Shut down buildings
  + 3 Do not activate buildings
  + 4 Hungry
  + 5 Ok
* Cold
* Sickness
* Happyness
* Starter pack
  + ~~3 burning mils~~
  + ~~1 furnace~~
  + ~~2 Small house~~
  + ~~1 Chop house~~
  + ~~1 Fruit picker~~

Building

* Entity
* Item
* Recipe
* Technology
* Names

Waste

* *Latrine* 
  + Wood en stone
* *Waste disposal*
* Chemical
  + *Fertilizer*
  + *Solid fuel*
  + *Sulfur*
* Solids
  + compost

Food

* ~~chop house~~
* ~~Cantine~~
* ~~Restaurant~~
* ~~Fish~~
  + Electric Fishing robot
  + Water => Noxys
  + Live-fish
  + Live-fish => raw-fish
  + ~~Fishing robot~~
  + Fishing boot
  + Fishing tech
    - Range
    - Cooking
  + ~~Recipes~~
* ~~Apples~~
* Locales for waste
* Cattle
  + ~~Cattle~~
  + ~~Calf~~
  + ~~Spawner~~
  + Feeder
  + ~~Grabber~~
  + ~~Butcher~~

Work

* *Buildings*
  + *Training center*
  + *School*
  + *University*
* *Jobs*
  + *Engineer*
  + *Manager*
  + *Worker*
  + *Environmentalist*
  + *Single, team, group*

Vehicles

* Driver
* Arrows
* Ambulance
* https://github.com/shanemadden/factorio-dozer

Military

* Turrets / Units
  + Machinegunnest
  + Sniper
  + Rocket

Hunger

* Percentage rises if not enough food eaten

Punishment

* Destroy buildings at random?
* Colonists rampaging
* Remove colonists from jobs

Rampaging mob

* Colonists detroying stuff

Fishing

* ~~Mashmod fishing machine~~

02.

Added a latrine for them to do their business

Change waste to: solid-fuel, sulphur or fertilizer

Added a school and university for higher level education

If in pods then in stasis

Colonists => Housing

Housing => Area

Colonists

* Created pods
  + Mined
  + Landed
  + Born
* Workers in housing <= inventory?
* Workers available
* Workers working
* Workers died
* Workers needed
* Workers hungry

<https://mods.factorio.com/mod/yi_engines>

<https://mods.factorio.com/mod/Yuoki>

<https://mods.factorio.com/mod/pyindustry>

<https://mods.factorio.com/mod/pyhightech>

<https://mods.factorio.com/mod/Hexi_Inline_Ore_Processing>

<https://mods.factorio.com/mod/fpp>

<https://mods.factorio.com/mod/cargo-ships>

<https://mods.factorio.com/mod/NPBees2>

<https://mods.factorio.com/mod/Bio_Industries>

<https://mods.factorio.com/mod/Portablechests>

<https://mods.factorio.com/mod/yi_railway>

[~~https://mods.factorio.com/mod/btsPollutionProductionMachine~~](https://mods.factorio.com/mod/btsPollutionProductionMachine)

<https://mods.factorio.com/mod/Dirigible>

<https://mods.factorio.com/mod/BiterPets>

<https://mods.factorio.com/mod/WatchTower>

<https://mods.factorio.com/mod/SteamShip>

<https://mods.factorio.com/mod/ships_extended>

<https://mods.factorio.com/mod/Treefarm-Lite-fix>

<https://mods.factorio.com/mod/Noxys_Waterfill>

<https://mods.factorio.com/mod/Flare%20Stack>

<https://mods.factorio.com/mod/ArtilleryDelivery>

<https://mods.factorio.com/mod/naked-rails>

<https://mods.factorio.com/mod/Arborium>

<https://mods.factorio.com/mod/folk-aquarium>

<https://mods.factorio.com/mod/WoodHarvester>

<https://mods.factorio.com/mod/ShowBotsOnMap>

<https://mods.factorio.com/mod/TerranBuildings%20V1>

<https://mods.factorio.com/mod/Hovercraft>

<https://mods.factorio.com/mod/CanalBuilder>

<https://mods.factorio.com/mod/truck>

<https://mods.factorio.com/mod/OutpostPower>

<https://mods.factorio.com/mod/RailTools>

<https://mods.factorio.com/mod/GameClock>

<https://mods.factorio.com/mod/ctg>

<https://mods.factorio.com/mod/VehicleSnap>

<https://mods.factorio.com/mod/WaterSpitters>

<https://mods.factorio.com/mod/module-requestor>

<https://mods.factorio.com/mod/VersepellesAquaFarm015>

<https://mods.factorio.com/mods/Sacredd/necromant>

<https://togos.github.io/togos-example-noise-programs/>

<https://mods.factorio.com/mod/PlaceRoadsLikeRails>

<https://mods.factorio.com/mod/Rampant>

<https://mods.factorio.com/mod/RampantArsenal>

<https://mods.factorio.com/mod/trucks>

# Daniels comments

Colonists Fixes

- Update and improve GUI system - needs to be moveable and have a "close" option on the left-hand side.

- Fix unresponsive colonist hunger system.

- Add available "food slot" in houses.

~~- Houses and clone duplicators need to require water - perhaps 100 water each cycle for T1 houses, 200 for T2 house and 300 water for T3 house of each food consumption cycle.~~

- Reproduction system - this would require a "empty house" recipe in which nearby populated house can populate over time. A hospital may be unlocked in mid-game which would increase the reproduction rate within its vicinity or area of influence.

Early Game

Remove burner drill + inserter entirely. Consider other "tier 0" machines mods add.

bob's tier 0 belts?

Tier Zero:

Colonist-powered

Note: Sort by "activity required" so colonists prioritize properly

Note: "Force attendance" to remove from above priority list + permanently power

"Manpower Inserter" to replace Burner inserter

"Mining encampment" to replace Burner drill

Same size as burner drill, larger effective area

Only as much throughput as burner drill.

"Research bench" - new building

Early game research.

Maybe have vanilla research stations require steel or other mid-game materials?

"Workshop" - new building

Essentially an assembler.

Same throughput as tier-1 assembler, but manpower > electricity

Tier One+:

Essentially vanilla

ALL machines require colonists to man

More colonists for lower-tier buildings.

E.g. tier 0: 8 colonists, t1: 4c, t3: 3c, etc.

Biggest jump is tier 0 to tier 1!

Optional Dependencies

AAI

AI chips to replace colonists in vehicles (e.g. trains) and machines

https://mods.factorio.com/mod/MaintenanceMadness

Colonists carry maintenance materials!

Colonist Entities

Colonists-as-entities instead of automagically moving around via statistics

Pathfinding between priority machines as above

SqueakThrough sub-dependency to allow squeakthrough pathfinding.

https://mods.factorio.com/mod/Mining\_Drones

Space Exploration

https://mods.factorio.com/mod/space-exploration

Alien Biomes

https://mods.factorio.com/mod/alien-biomes

Transport Drones

https://mods.factorio.com/mod/Transport\_Drones

https://mods.factorio.com/mod/Transport\_Drones\_Addon\_PPD

Stone Age

https://forums.factorio.com/viewtopic.php?t=62509

https://forums.factorio.com/viewtopic.php?t=64142

https://www.reddit.com/r/factorio/comments/94if5d/stone\_age\_factorio\_mod\_looking\_for\_input/

Player will be able to collect rocks which are picked up off the ground as a resource and can harvest sticks from bushes as a resource which can be crafted into a stone axe/pickaxe with reduced mining speed compared to the steel axe.

Colonists require tools to construct?