**LEARNING CONTRACT**

**ENGLISH FOR BIOLOGY**

**Dr. Slamet Suyanto, M. Ed.**

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| **Meeting #** | **Topic** | **Activity** | **Doer** |
| I | Learning ContractCourse OverviewGroupingGroup Assignment | Discuss:Learning ContractCourse OverviewGroup Assignment | LECTURER |
| II | Properties & classification | Present and discuss:Characteristics of living and non living thingsClassification of invertebrates and vertebratesThe characteristics of fish, amphibians, reptiles, birds, and mammals  | Group I |
| III | Shapes & Symmetry | Present and discuss:The shapes and parts of living things: Rod, chain, comma, spherical, cylindrical, cone, ring, tape, segmented, circular, spherical, etc.Bilateral, radial symmetry, sagittal, frontal, transversal, etc. | Group II |
| IV | Location & parts | Present and discuss:The location of organs: The tip, the top, on top, axial, terminal, dorsal, ventral, chephal, caudal, etc.Parts of leaf, stem, flower, root, parts of human body and animals | Group III |
| V | Structure and functions | Present and discuss:Skeletal system, digestive system, respiratory system,  | Group IV |
| VI | Structure and functions | Present and discuss:Nervous system, excretory system, endocrine system, reproductive system,  | Group V |
| VII | Midterm exam | Examination topic 2-6 | All students |
| VIII | Measurement | Present and discuss:Length, width, height, weight, cross, volume, temperature, acid, alkali, humiditySquare, cubic, kilogram, meter, micrometer, nanometerscale | Group VI |
| IX | Growth and development | Present and discuss:Vegetative and generative, Stages of embryo development, Life cycle, metamorphosis, metagenesis | Group VII |
| X | Growth and development | Present and discuss:Flower, parts of flowers, Pollination, fertilizations, Seed, seedling, epicotyls, hypocotyls, cotyledon | Group VIII |
| XI | Design of experiment | Present and discuss:Cause and effectsDesigns of experimentExplorationVariables | Group IX |
| XII | Quantity and proportion | Present and discuss:Data, Table, graphPercentage, ratioFrequency, tendency, probability | Group X |
| XIII | Minerals, water, and enzyme | Present and discuss:Atom, minerals, elements, substances, compound, molecule, chemical reaction, endergonic, exergonic  | Group XI |
| XIV | Minerals, water, and enzyme | Present and discuss:protein, lipids, carbohydrates, nucleic acid,enzyme, biocatalysator  | Group XII |
| XV | Food and nutrition | Present and discuss:Meat, Vegetable, cereals, Fruits, Vitamins and mineralsMalnutrition, obesity | Group XIII |
| XVI | Final exam | Topic 8-14 | All students |

Every meeting the lecturer give elaboration and confirmation to what the students write and present.

Grading system:

Paper & presentation 40%

Midterm exam 25%

Final exam 25%

Participation 10%