

<p><b>(Course Title)</b> Biology in Kyoto iUP preparatory course</p> <p><b>(Affiliated department)</b> Graduate School of Agriculture</p> <p><b>(Job title)</b> Associate Professor</p> <p><b>(Name)</b> PILLER, Garry</p>	<p><b>(Course offered period)</b> 2<sup>nd</sup> Semester</p> <p><b>(Numbers of weekly frame)</b> Two</p> <p><b>(Class style)</b> Lecture</p> <p><b>(Eligible students)</b> Students of Kyoto iUP Preparatory course</p> <p><b>(Day/period)</b> Tuesday/2 and Wednesday/2</p>
<p><b>(Outline and Purpose of the Course)</b></p> <p>To provide a basic knowledge of biology for admission into an undergraduate course at the School of Science, Engineering, or Agriculture.</p>	
<p><b>(Course Goals)</b></p> <p>Kyoto iUP Biology is an intensive course designed to expose international students to higher level biological principles, concepts and skills required to solve EJU* level problems: equivalent to those of Japanese high school graduates.</p> <p>* Examination for Japanese Admission for International Students (EJU)</p>	
<p><b>(Course Schedule and Contents)</b></p> <p>Lectures, course materials and exercises will be centered around the following themes:</p> <p><b>Cell Biology &amp; Energetics</b></p> <p>Proteins &amp; Nucleic Acids, Cell Structure &amp; Function, Animal vs Plant Cells, Cytoskeleton, Metabolism, Respiration, Photosynthesis, Alternative Carbon Fixation</p> <p><b>Genetics</b></p> <p>Cell Cycle, DNA Replication, Gene Expression &amp; Regulation (Transcription &amp; Translation), Biotechnology</p> <p><b>Reproduction</b></p> <p>Sexual Reproduction, Genes, Chromosomes, Genomes, Gene Linkage/ Crossover/ Recombination, Animal &amp; Plant Reproduction and Development</p> <p><b>Ecology/ Ecosystems</b></p> <p>Populations, Communities, Ecosystems, Biosphere, Biodiversity, Conservation</p>	
<p><b>(Class requirement)</b></p> <p>Students should be enrolled in the Kyoto iUP course.</p>	
<p><b>(Evaluation methods and policy)</b></p> <p>A final exam will be held at the end of the intensive preparatory course to evaluate progress.</p>	
<p><b>(Others (office hour, etc.))</b></p> <p>Open door policy during office hours and anytime by email.</p>	
<p><b>(Textbook)</b></p> <p>Customized open-source documents and slide presentations will be prepared and uploaded to the course Panda site prior to class.</p>	