I. Introduction to Solar Energy
II. Review of Solid State Physics

III. Solid State Physics of Photovoltaics
   A. Single Crystal Si
   B. Polysilicon
   C. Amorphous Si
   D. Thin-film Si
   E. Other Semiconductors
   F. Dye-sensitized Cells

IV. Photovoltaic Modules and Arrays
   A. Construction
   B. Orientation
   C. Concentration and Tracking
   D. Shading

V. Photovoltaic Systems and Applications
   A. Grid-connected systems
   B. Stand-alone systems
   C. Inverters
   D. Batteries
   E. Charge controllers
   F. Hybrid Systems

VI. Outer Space Applications

VII. Student Presentations