

Foundational Food Science (Bridge Course)

Contact Classes [6 hours Module]:

- Cell- Structure & Function , Cellular Transport System (1hour)
 - Digestive system – i) Anatomical Structure & Function
 - ii) Brief study of the digestion, absorption and assimilation of food (1hour)
 - Food (Functions and Constituents of food) (1hour)
 - Structure, classification and biochemical role of Carbohydrate, Protein & Lipid in Human Body (1hour)
 - Brief Overview of Vitamins , Minerals & Water (1hour)
 - Basic Concepts of Food Microbiology (1hour)
- Spot Assessment & Remedial.

Reference Books:

1. Chatterjee's ,CC.(2020) : Human Physiology,13th Edition , CBS Publication Distributors Pvt. Ltd.
2. Chaudhury Sujit K : Concise Medical Physiology (2016) , NCBA
3. Mahapatra ABS, Mahapatra GS: Essentials of Medical Physiology (2021) ,5th Edition , Current Books International
4. Das, Debajyoti (2022) : Biochemistry , 14th Edition , Academic Publishers
5. Srilakshmi, B.(2019):Dietetics,8th edition, New Age International(P) Limited Publishers, New Delhi
6. Srilakshmi, B.(2019):Food Science,8th edition, New Age International(P) Limited Publishers, New Delhi
7. Srilakshmi, B.(2019):Nutrition Science,8th edition, New Age International(P) Limited Publishers, New Delhi.
8. Food & Nutrition,Arya Publishing House(2017)
9. Frazier.W.C; Food Microbiology-McGraw Hill Book and Co; New York

Self-Placed Learning

Through Massive Open Online Courses (MOOCs): (20 hours)

- **Online Resources:**

- ❖ Human Digestive System Physiology (2 hour 21 minutes)
<https://youtu.be/S1hdq8ugaQY>
- ❖ Cell Membrane Transport (1hour 29 minutes)
<https://youtu.be/FMttHoW2QiE>
- ❖ Biomolecules Amino Acids & Proteins (1 hour 26 minutes)
<https://www.youtube.com/watch?v=fE6shCFJepo>
- ❖ Biomolecules , Lipid & Nucleic Acids (1 hour 23 minutes)
<https://youtu.be/svNRVZmImh4>
- ❖ Biomolecules Carbohydrates (1 hour 3 minutes)
<https://www.youtube.com/watch?v=DvSRGr5r6hM>
- ❖ Food Microbiology (1 hour 40 minutes)
https://youtu.be/md_NJDDmfAs
https://youtu.be/el62Xpoyr_I
<https://youtu.be/RU9EqGjFuq4>
<https://youtu.be/tZKonCiEqoU>
- ❖ Metabolism (13 hour)
<https://www.youtube.com/playlist?list=PLTF9h-T1TcJhy6Og8piwo8doDJavTFOvg>

- Doubt Clearing Session (4 hours)