

Fluids, Nutrition and Metabolism

The fourth module of the year introduces you to the functions and anatomy of the kidneys, gastrointestinal tract, pelvis & abdomen in general. As well as the clinical problems associated with the region and how it is affected by disease. This module consists of roughly 70 sessions.

Topics Covered

- **Anatomy** – abdominal wall, abdominal cavity, the gut, retroperitoneum and the pelvis.
- **Biochemistry** – carbohydrate metabolism, ATP, fat metabolism, citric acid cycle, urea cycle and regulation.
- **Physiology of the GI tract** – salivary secretion, gastric secretion, pancreas, liver, absorption, motility and pathology.
- **Renal physiology** – body fluids, kidney function, glomerular filtration, renal clearance, sodium and water regulation, acid-base balance and pathology.
- **Nutrition** – energy balance, body fuels, nutrition requirements, obesity, malnutrition and fad diets.
- **Embryology** – development of the digestive tract and the urinary tract.

Learning Methods

- Lectures – usually a one-hour teaching session.
- PBL – problem-based learning, with a tutor in a small group.
- CAL – computer-assisted learning, in dry lab rooms with a tutor.
- SPL – self paced learning, homework tasks that you can tackle at your own pace.
- Tutorials – small group tackling a subject and clinical cases with a tutor.
- Anatomy laboratory – cadaver dissections with supervision.

Resources

- Dean MC & Pegington J. Core Anatomy for students Vol 2, The thorax, abdomen, pelvis and perineum.
- Young B, Stevens A & Lowe JS. Wheater's Functional Histology.
- Rang HP, Dale MM, Ritter JM & Flower R. Pharmacology.
- Pocock G, Richards CD and Richards DA Human Physiology.

Tips

- Mind maps and diagrams are great for biochemistry and linking concepts together.
- Take note of biochemistry conditions and diseases, focus on relevant parts of the cycle.
- Take your time to understand the module thoroughly and ensure you have spent sufficient time on it.
- Learn the anatomy (organs/structures etc) in relation to one another.
- Anatomy Moodle questions are a useful resource.

For more details, visit the module Moodle page.