جدول اكواد المقررات الدراسية للفرقة الثانية تيرم ثاني

م	اسم المقرر	الكود
1	ميكروبيولوجيا الامراض	PM 604
2	صيدلة حيوي	PT 606
3	كيمياء عقاقير	PG 606
4	كيمياء حيوي	PB 603
5	تركيبات الاشكال	PT 605
6	فارماكوكينتك	PP 601

كلية الصيدلة

جامعة المنوفية

القسم: التكنولوجيا الصيدلية

الفرقة: الثانية

اسم المقرر: تركيبات الاشكال

كود المقرر: PT 605

Titles of research projects of Pharmaceutical Formulation Course – Second year pharmacy students- Second term 2019/2020

1. Chemical enhancers for increasing drug permeation through skin layers.
2. Physical methods of skin penetration enhancement.
3. Types and approaches of transdermal therapeutic system.
4. Types and chemical classification of ointments base
5. Types and physical classification of ointments base.
6. Ocular drug delivery.
7. Absorption of drugs from the rectum.
8. Physiological and physicochemical factors affecting rectal absorption.
9. Oleaginous suppository bases (types, specifications and properties).
10. Water-miscible suppository bases (types, specifications and properties).
11. Suppositories compounding
12. Quality control tests of suppositories
13. Efficacy of mesotherapy in facial rejuvenation
14. Chemical Skin Peeling ,indicating the different types of peeling agents and different types of chemical skin peeling, benefits versus side effects
15. Importance of Antiperspirants and Deodorants, indicating the differences between them, mechanism of action, properties and formulation
16. Cellulite is an unsightly distribution of fat under the skin, discuss the possible causes and possible treatments
17. Toothpaste types

كلية الصيدلة

جامعة المنوفية

القسم: التكنولوجيا الصيدلية

الفرقة: الثانية

اسم المقرر: صيدلة حيوي

كود المقرر: PT 606

Titles of research projects of Biopharmaceutics Course – Second year pharmacy students Second term 2019/2020

1) Drugs absorbed by active transport (give examples with detailed description)
2) Drugs absorbed by facilitated diffusion (give examples with detailed description)
3) Drugs absorbed by vesicular transport (give examples with detailed description)
4) Drugs absorbed by paracellular transport (give examples with detailed description)
5) Effect of partition coefficient on oral drug absorption
6) Effect of drug diffusion coefficient on oral drug absorption
7) Effect of drug charge on oral drug absorption
8) Effect of drug affinity to tissue component on oral drug absorption
9) Effect of drug stability on oral drug absorption
10) Effect of gastric emptying rate on oral drug absorption
11) Effect of enteric coating on oral drug absorption
12) Effect of type of dosage form on oral drug absorption
13) Effect of drug-food interaction on oral drug absorption
14) Effect of excipients (diluent) on oral drug absorption
15) Effect of excipients (glidant and lubricant) on oral drug absorption
16) Effect of excipients (surfactant) on oral drug absorption
17) Formulation approaches for improving oral drug bioavailability of a class II drug model
18) Formulation approaches for improving oral drug bioavailability of a class III drug model
19) Formulation approaches for improving oral drug bioavailability of a class IV drug model
20) Effect of plasma protein binding on drug distribution
21) Effect of plasma protein binding on drug pharmacological activity

22) **Effect of plasma protein binding on drug metabolism**
23) **Effect of plasma protein binding on drug excretion**
24) **Drugs suffering from first pass metabolism (give examples with detailed description)**
25) **Drugs act as enzyme inducer (give examples with detailed description)**
26) **Drugs act as enzyme inhibitor (give examples with detailed description)**
27) **Effect of drug-drug interaction on renal excretion**
28) **Drugs undergoes enterohepatic circulation (give examples with detailed description)**
29) **Drugs excreted by renal route (give examples with detailed description)**
30) **Drugs excreted by pulmonary route (give examples with detailed description)**
31) **Drugs excreted by bilialry route (give examples with detailed description)**

كلية الصيدلة
جامعة المنوفية

القسم: الصيدلة الاكلينيكية
الفرقة: الثانية

اسم المقرر: فارماكوكينتك
كود المقرر: PP 601

العناصر المطلوبة في البحث:

1. **Introduction (Pharmacologic-Therapeutic Classification, Indications)**
2. **Therapeutic and toxic concentrations**
3. **Clinical monitoring parameters**
4. **Basic clinical pharmacokinetic parameters (Pharmacokinetic model, T0.5, Vd, Cmax, Tmax, AUC, Bioavailability, Onset of action, Duration of response, Metabolism, Excretion)**
5. **Effects of disease states and conditions on pharmacokinetics and dosing (Renal and Hepatic Disease, Dialysis, Heart Failure, and Obesity)**
6. **Initial dosage determination methods including Equations**
7. **Use of serum concentrations to alter dosages**
8. **Dosing strategies**
9. **References**

Note: Support your data with Equations as possible

NO	Project name
1	The Pharmacokinetics of The Aminoglycoside Antibiotics Gentamicin
2	The Pharmacokinetics of Vancomycin
3	The Pharmacokinetics of Digoxin
4	The Pharmacokinetics of Lithium
5	The Pharmacokinetics of Theophylline
6	The Pharmacokinetics of Phenytoin
7	The Pharmacokinetics of Procainamide
8	The Pharmacokinetics of Carbamazepine
9	The Pharmacokinetics of Valproic Acid
10	The Pharmacokinetics of Phenobarbital
11	The Pharmacokinetics of The Aminoglycoside Antibiotics Amikacin

12	**The Pharmacokinetics of The Aminoglycoside Antibiotics Tobramycin**
13	**The Pharmacokinetics of Quinidine**
14	**The Pharmacokinetics of Ethosuximide**
15	**The Pharmacokinetics of Lamotrigine**
16	**The Pharmacokinetics of Levetiracetam**
17	**The Pharmacokinetics of Oxcarbazepine**
18	**The Pharmacokinetics of Eslicarbazepine**
19	**The Pharmacokinetics of Fosphenytoin**
20	**The Pharmacokinetics of Cyclosporine**
21	**The Pharmacokinetics of Tacrolimus**
22	**The Pharmacokinetics of Sirolimus**
23	**The Pharmacokinetics of Pimozide**
24	**The Pharmacokinetics of Clozapine**
25	**The Pharmacokinetics of Adalimumab**
26	**The Pharmacokinetics of Certolizumab pegol**
27	**The Pharmacokinetics of Infliximab**
28	**The Pharmacokinetics of Mycophenolate mofetil**
29	**The Pharmacokinetics of Azathioprine**
30	**The Pharmacokinetics of Methotrexate**
31	**The Pharmacokinetics of Gabapentin**
32	**The Pharmacokinetics of Primidone**
33	**The Pharmacokinetics of Lamotrigine**
34	**The Pharmacokinetics of Levetiracetam**
35	**The Pharmacokinetics of Topiramate**
36	**The Pharmacokinetics of Zonisamide**
37	**The Pharmacokinetics of Eslicarbazepine acetate**
38	**The Pharmacokinetics of Felbamate**
39	**The Pharmacokinetics of Lacosamide**
40	**The Pharmacokinetics of Pregabalin**
41	**The Pharmacokinetics of Rufinamide**
42	**The Pharmacokinetics of Stiripentol**
43	**The Pharmacokinetics of Tiagabine**
44	**The Pharmacokinetics of Vigabatrin**
45	**The Pharmacokinetics of Imipramine**
46	**The Pharmacokinetics of Amitriptyline**
47	**The Pharmacokinetics of Nortriptyline**
48	**The Pharmacokinetics of Doxepin**

كلية الصيدلة

جامعة المنوفية

القسم: العقاقير

الفرقة: الثانية

اسم المقرر: كيمياء العقاقير

كود المقرر: PG 606

- The research project should start with an introduction, Body text and end with a conclusion and references.
- Clear information should be given about (If present):
  1. The botanical origin of the drugs.
  2. Major constituents.
  3. Pharmacological, Toxicological and Side effects.
  4. Pharmaceutical preparations available in the Egyptian drug market and/or international market
  5. References (books, journals, internet sites).
- Each student will should achieve the following tasks, after careful selection of the topic of interest.

  Task 1: Data collection

  Task 2: Data organization.

  Task 3: Preparation of Word text.

  Task 4: Revision of the final copy.

- Focus your research on drugs you did not study this semester and collect data about at least three drugs.
- Design figures and tables, whenever possible.
- Do not use copy and paste function to prepare your file, instead, express sentences in your own way.

Research topics for PHYTOCHEMISTRY II -Second year 2nd semester, 2019/2020

Project No.	Topics covered
2.1	Use of Nutraceuticals in cancer management
2.2	Applications of nutraceuticals in diabetes management
2.3	Antiviral essential oils
2.4	Volatile oils in aromatherapy applications
2.5	Essential oils from animal resources
2.6	Quality control of herbal medicines by using spectroscopic techniques

كلية الصيدلة
جامعة المنوفية

القسم: الكيمياء الحيوية
الفرقة: الثانية

اسم المقرر: كيمياء حيوي
كود المقرر: PB 603

Biochemistry II research topics

1. **Lipid storage disease**
2. **Glycogen storage disease**
3. **Disorders of carbohydrate & fat metabolism in diabetes mellitus**
4. **Disorders of galactose metabolism**
5. **Disorders of fructose metabolism**
6. **Drug interference with urine tests**
7. **Urine analysis**
8. **Disorders of Tyrosine metabolism**
9. **Hyperammonemia**
10. **Hartnup's disease**

Topics should include:

1. **Definition of the disease**
2. **Causes of the disease**
3. **Sign and symptoms**
4. **Treatment**

كلية الصيدلة
جامعة المنوفية

القسم: الميكروبيولوجيا الصيدلية
الفرقة: الثانية

اسم المقرر: ميكروبيولوجيا الامراض
كود المقرر: PM 604

Suggested Topics for Students Assessment:

1. **Bacterial Causes of Respiratory Tract (RT) Infections**
2. **Bacterial Causes of Urinary Tract (UT) Infections**
3. **Bacterial Causes of Gastrointestinal Tract (GIT) Infections**
4. **Bacterial Causes of Congenital diseases**
5. **Bacterial Causes of Sexually transmitted diseases**

6- Natural immunity in face to covid-19.

- Introduction to covid-19
- Types of natural immunity.
- Role of natural immunity to overcome covid-19

7-Acquired immunity in face to covid-19.

- Introduction to covid-19
- Types of acquired immunity.
- Role of acquired immunity to overcome covid-19

8- Prevention and treatment of covid-19.

- Introduction to covid-19
- General antiviral drugs with their mechanism of action.
- Specific anti-covid-19 with their mechanism of action.

9- Prevention and prophylaxis of covid-19.

- Introduction to covid-19
- Differences between prevention and prophylaxis.
- General methods for prevention of covid-19.

- **Suggested Template for the Project:**
  It is recommended to illustrate using Figures, Charts or Tables.