

Peer Revision

Reviewers	University	Date of Revision
- Prof. Dawlat Salem	Cairo	10/12/2011
- Prof. Ahmad K. Mansur	Mansura	28/11/2011

Program Specification of MD Degree in Clinical Pharmacology

Sohag university

Faculty of medicine

A. Basic Information

1. Program Title: Doctorate Degree in Clinical Pharmacology
2. Program Type: Single
3. faculty: Faculty of Medicine
4. Department of Clinical Pharmacology
5. Coordinator: Dr: Sanaa Abd Elaal
6. Assistant coordinator: Hala Erahem Madkor
7. External Evaluator(s). Prof. Dr. Alaa-elden elkousy
8. Last date of program specifications approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

B. Professional Information

1. Program Aims:

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mastery of practice of specialty and necessary to provide further training and practice in the field of Clinical Pharmacology through providing:

- 1- Recent Scientific knowledge essential for the mastery of practice of Clinical Pharmacology according to the international standards.
- 2- Skills necessary for proper processing and diagnosis of submitted tissue specimens including problem solving and decision-making skills.
- 3- Ethical principles related to handling tissue specimens of the patients.
- 4- Active participation in community needs assessment and problems identification.
- 5- maintainance of learning abilities necessary for continuous medical education
- 6- Upgrading research interest and abilities.

2. Attributes of the student:

1. Efficient in carrying out the basics and methodologies of scientific research.
2. The continuous working to add new knowledge in the field of Clinical Pharmacology.
3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the pharmacological knowledge with the other related knowledge with conclusion and developing the relationships in between them.
5. Showing a deep awareness with the ongoing problems, theories, and advanced sciences in the specialty of Clinical Pharmacology.
6. Determination of the professional problems in the specialty of Clinical Pharmacology and creating solutions for them.
7. Efficient in carrying out the professional skills in his specialty.
8. Using advanced suitable technologies which serves his practice.
9. Efficient communication and leadership of team work in his specialty.
10. Decision making through the available information.
11. Using the available resources efficiently and working to find new resources.
12. Awareness with his role in the development of the society and preserve environment.
13. Behaving in a way which reflects his credibility, accountability, and responsibility.
14. Keeping continuous self development and transfer his experiences and knowledge to others.



Program Specification of MD Degree in Clinical Pharmacology

Sohag university

Faculty of medicine

A. Basic Information

1. Program Title: Doctorate Degree in Clinical Pharmacology
2. Program Type: Single
3. faculty: Faculty of Medicine
4. Department of Clinical Pharmacology
5. Coordinator: Dr: Sanaa Abd Elaal
6. Assistant coordinator: Hala Erahem Madkor
7. External Evaluator(s). Prof. Dr. Alaa-elden elkousy
8. Last date of program specifications approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018.

B. Professional Information

1. Program Aims:

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mastery of practice of specialty and necessary to provide further training and practice in the field of Clinical Pharmacology through providing:

- 1- Recent Scientific knowledge essential for the mastery of practice of Clinical Pharmacology according to the international standards.
- 2- Skills necessary for proper processing and diagnosis of submitted tissue specimens including problem solving and decision-making skills.
- 3- Ethical principles related to handling tissue specimens of the patients.
- 4- Active participation in community needs assessment and problems identification.
- 5- maintenance of learning abilities necessary for continuous medical education
- 6- Upgrading research interest and abilities.

2. Attributes of the student:

1. Efficient in carrying out the basics and methodologies of scientific research.
2. The continuous working to add new knowledge in the field of Clinical Pharmacology.
3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the pharmacological knowledge with the other related knowledge with conclusion and developing the relationships in between them.
5. Showing a deep awareness with the ongoing problems, theories, and advanced sciences in the specialty of Clinical Pharmacology.
6. Determination of the professional problems in the specialty of Clinical Pharmacology and creating solutions for them.
7. Efficient in carrying out the professional skills in his specialty.
8. Using advanced suitable technologies which serves his practice.
9. Efficient communication and leadership of team work in his specialty.
10. Decision making through the available information.
11. Using the available resources efficiently and working to find new resources.
12. Awareness with his role in the development of the society and preserve environment.
13. Behaving in a way which reflects his credibility, accountability, and responsibility.
14. Keeping continuous self development and transfer his experiences and knowledge to others.

3. Intended learning outcomes(ILOS):

a) Knowledge and understanding:-

- a1. Enumerate theories and fundamentals and knowledge in the learning of Clinical Pharmacology specialty and related fields.
- a2. Enumerate scientific developments in the field of Clinical Pharmacology.
- a3. Enumerate the mutual influence between professional practice and its impacts on the environment.
- a4. Enumerate ethical and legal principles of professional practice in the field of...Clinical Pharmacology
- a5. Describe the principles and fundamentals of quality in professional practice in the field of Clinical Pharmacology
- a6. Enumerate the principles and fundamentals of quality in professional practice in the field of Clinical Pharmacology
- a7. Enumerate the principles of general Clinical Pharmacology.
- a8. Describe the principles and fundamentals of quality in professional practice in the field of Clinical Pharmacology.
- a9. Mention the basics and ethics of scientific research, biostatistics and computer

b) Intellectual skills

By the end of the study of master program in Clinical Pharmacology the Graduate should be able to:

- b1. Analyze and evaluate of information and data in the field of Clinical Pharmacology and titration in accordance.
- b2. Solve Problems in the specialty of Clinical Pharmacology in light of the available data.
- b3. Link between knowledge for Professional problems' solving.
- b4. Conduct a research study and / or writing a scientific study on a research problem.
- b5. Assess risks in professional practices in the field of Clinical Pharmacology
- b6. Plan for the development of performance in the field of Clinical Pharmacology
- b7. Make Professional decisions' in diverse professional contexts.
- b8. Analyze reading of research and issues related to the Clinical Pharmacology

c) Professional and practical skills

By the end of the study of master program in Clinical Pharmacology the Graduate should be able to:

- c1. Master the basic and modern professional skills in the area of Clinical Pharmacology
- c2. Write and evaluate medical reports.
- c3. Assess methods and tools existing in the area of Clinical Pharmacology
- c4. Perform recent advanced technological methods in collection, analysis and interpretation of data
- c5. Design new methods, tools and ways of professional practice.

d) General and Transferable skills:

By the end of the study of master program in Clinical Pharmacology the Graduate should be able to :

- d1. Communicate effectively by its different types.
- d2. Use information technology to serve the development of professional practice
- d3. Assess himself and identify personal learning needs.
- d4. Use different sources to obtain information and knowledge.
- d5. Develop rules and indicators for assessing the performance of others.
- d6. Work in a team, and team's leadership in various professional contexts.
- d7. Manage time efficiently.
- d8. Learn himself continuously.

4. Academic standard:-

Sohag faculty of medicine adopted the general national academic reference standards (NARS) provided by the national authority for quality assurance and accreditation of education (naqaae) for postgraduate programs. This was approved by the faculty council degree No 6854, in its session No.177. Date 18-5-2009. Based on these NARS; Academic References standard (ARS) were suggested for this program. These ARS were approved by faculty council degree No 7528, in its session No.191. Date 15-3-2010. The adoption of NARS and the suggested ARS were approved by University council degree No 587, in its session No.60. Dated 26-12-2011

5. Curriculum Structure: (Courses/Modules/Units/Rotations):

1.5a-program duration: 7 semesters (3.5 years).

2.5 b. program structure

3.5b.i. No. of hours per week.

Subject	hours /week		
	Lectures	Practical	Clinical
First Part:			
Minors :			
1- Bio Statistics & Computer	2	2	---
2- Research Methodology	2	2	
Optional courses: one of the followings:			
1. New in Clinical Pharmacology of psychology	4		
2. Drugs abuse and addiction	4		
3. New events in anti-infective and anticancer agents	4		
4. Advanced research in Clinical Pharmacology of mouth and teeth	4		
5. Methods to evaluate and develop drugs	4		
6. Drugs economics	4		
7. alternative therapy	4		
8. Advanced research in chromatography	4		
9. advanced research in electric and electronic measurements for brain nerves and muscle activities	4		
Second part:			
Clinical Pharmacology	7 h/w	12.5 h/w	

code	Item	No	%	
b.i	Total credit hours	Compulsory	82	91.2
		Elective	0	0
		Optional	8	8.8
b.iii	credit hours of basic sciences courses	8	8.8	
b.iv	credit hours of courses of social sciences and humanities	0	0	
b.v	credit hours of specialized courses:	53	58.8	
b.vi	credit hours of other course	8	8.9	
b.vii	Practical/Field Training	8	8.9	

b.viii	Program Levels (in credit-hours system):		
	Level 1: 1 st part	14	15.5
	Level 2: 2 nd Part	53	58.8
	Level 3: Thesis	15	16.7

6. **Program Courses** Two courses are compulsory + 9 optional courses and the candidate choose 2 courses.

6.1- Level/Year of Program:

Semester...1.....

First part:

a. Compulsory

Course Title	Total No. of credit hours	No. of hours /week			Programme ILOs Covered (By No.)
		Lect.	prac.	clinical.	
1- Biostatistics and computer & SPSS.	3	2	2	-	A9,b1 ,c4,c5,d4
2- Research Methodology	3	2	2	-	A9,b4,b8,c1, d4,d6

b- **Optional** : Two courses are required

Course Title	Total No. of credit hours	No. of hours /week			Programme ILOs Covered (By No.)
		Lect.	Lab.	Exer.	
1. New in Clinical Pharmacology of psychology	4	4	-	-	a5, a6, a7, b6, b7, b8, c1, c2, d3, d5, d6
2. Drugs abuse and addiction	4	4	-	-	a8, a9, b3, b4, b5, c3, d4, d7, d8
3. New events in anti-infective and anticancer agents	4	4	-	-	a5, a6, a7, b6, b7, b8, c1, c2, d3, d5, d6
4. Advanced research in Clinical Pharmacology of mouth and teeth	4	4	-	-	a8, a9, b3, b4, b5, c3, d4, d7, d8
5. Methods to evaluate and develop drugs	4	4	-	-	a5, a6, a7, b6, b7, b8, c1, c2, d3, d5, d6
6. Drugs economics	4	4	-	-	a8, a9, b3, b4, b5, c3, d4, d7, d8
7. alternative therapy	4	4	-	-	a8, a8, b3, b4, b5, c3, d4, d7, d8
8. Advanced research in chromatography	4	4	-	-	a8, a9, b3, b4, b5, c3, d4, d7, d8
9. advanced research in electric and electronic measurements for brain nerves and muscle activities	4	4	-	-	a5, a7, a7, b6, b7, b8, c1, c2, d4, d5, d6

Second part:

Clinical Pharmacology	53	7 h/w	12.5 h/w		a1, a2, b1, b2, c1, c2, d1, d2
					a1, a3, b1, b4, c1, c2, d1, d2

7. **Program Admission Requirements**

I- General Requirements.

- Candidate should have either MBBch degree from any Egyptian Faculty of Medicine or Equivalent Degree from Medical Schools abroad approved by the ministry of high Education.
- Candidate should know how to speak & write English well
- Candidate should have computer skills.
- Follow postgraduate by law Regulatory rules of Sohag Faculty of Medicine approved by the ministerial decree No. (44), dated 6/1/2010.

II- Specific Requirements

- Master degree in Clinical Pharmacology with at least "Good Rank".

8. Regulations for Progression and Program Completion

Duration of program is 90 credit hours (≥ 7 semesters ≥ 3.5 years), starting from registration till acceptance of the thesis; divided to:

First Part: (15 Credit hours ≥ 6 months ≥ 1 semester):

- Program-related basic science, Research Methodology, Ethics & medical reports, Biostatistics and computer.
- At least six months after registration should pass before the student can ask for examination in the 1st part.
- Two sets of exams: 1st in October — 2nd in April after fulfillment of the credit hours.
- At least 60% of the written exam and 60% of the total oral and practical/clinical is needed to pass in each course.
- For the student to pass the first part exam, a score of at least 60% (Level D) in each course is needed.
- Those who fail in one course need to re-exam it only.
- GPA of ≥ 1.3 is needed to pass this level (semester).

Second Part: (50-60 Credit hours ≥ 24 months= 4 semesters):

- Program related specialized science of Clinical Pharmacology courses. At least 24 months after passing the 1st part should pass before the student can ask for examination in the 2nd part.
- Fulfillment of the requirements in each course as described in the template and registered in the log book (8 Credit hours; with obtaining $\geq 75\%$ of its mark) is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; the credit hours of the logbook are calculated as following:
 - Each Cr. Hr.= 60 working Hrs.
 - Logbook= 8 Cr. Hr. X 60 working Hrs = 480 Working Hrs.
 - Collection of working Hrs. is as following:

Activity		Hrs
Grand rounds	اجتماع علمي موسع	٦
Training courses	دورات تدريبية	12/ day
Conference attendance	حضور مؤتمرات علمية داخلي خارجة	١٢/day 18/day
Thesis discussion	حضور مناقشات رسائل	٦
Workshops	حضور ورش عمل	١٢/day
Journal club	ندوة الدوريات الحديثة	٦

Seminars	لقاء علمي موسع	٦
Morbidity and Mortality conference	ندوة تحليل المخاطر المرضية أو الوفاة	٦
Self education program	برنامج التعليم الذاتي	٦

- Two sets of exams: 1st in October - 2nd in April.
- At least 60% of the written exam is needed to be admitted to the oral and practical exams.
- 4 times of oral and practical exams are allowed before the student has to re-attend the written exam.

Third Part (Thesis) (15 Credit hours =24-48 months=4-8 semester):

- Documentation of the subject should not be delayed for > 1.5 years after registration.
- Could start after registration and should be completed, defended and accepted after passing the 2nd part final examination, after passing of at least 24 months after documentation of the subject of the thesis and after publishing of at least one paper from the thesis in a specialized peer-reviewed journal.
- Accepting the thesis is enough to pass this part.

9. Methods of student assessments:

Method of assessment	weight	The assessed ILOs
1-Research assignment		- General transferable skills, intellectual skills
2-Written Exams: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	50%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills
3-OSCE/ OSPE	50%	-Practical skills, intellectual skills, general transferable skills
4-Structured Oral Exams		- Knowledge, Intellectual skills, General transferable skills

Assessment schedule:

Part I:

- Biostatistics & Computer: Written Exam (2 hours) + Structured oral Exam
- Research Methodology: Written Exam (2 hours) + structured oral Exam
- The first optional course: Written Exam (3 hours) + structured oral Exam
- The second optional course: Written Exam (3 hours) + structured oral Exam

Part II:

- Clinical Pharmacology: Two written Exam (3 hours for each) + OSPE + Structured oral Exam.

10. Evaluation of programme intended learning outcomes

Evaluator	Tool	Sample
1- Senior students	Questionnaire	30%
2- Alumni	Questionnaire	30%
3- Stakeholders (Employers)	Questionnaire	45%
4-External Evaluator(s) (External Examiner(s))		
5- Other		

Course Specification of Applied Biostatistics (with computer use) For MD of Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD. Clinical Pharmacology.
2. Minor or major element of the program: minor.
3. Department offering the program: Clinical Pharmacology
4. Department offering the course: Community Medicine and public Health Dep.
5. Academic year: Doctoral Degree 1st part.
6. Last date of program specifications approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Course Specification of Applied biostatistics (with computer use) For MD of Clinical Pharmacology

Code : COM 0505-300

Total hours

Title	Lecture	Practical	Total	Credit
Applied biostatistics (with computer use)	30	30	60	3

B. Professional Information

1. Overall Aims of Course

To use precisely medical biostatistics and computer programs

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Enumerate different programs of analysis of data and statistical packages
- a2. Define the recent advances of sources of data and methods of collection.
- a3. Summarize data, construct tables and graphs
- a4. Calculate measures of central tendency and measures of dispersion
- a5. Describe the normal curves and its uses
- a6. Illustrate selected tests of significance and the inferences obtained from such tests
- a7. Illustrate selected tests of significance for parametric and non parametric inferences
- a8. Identify factor analysis and discrimination analysis

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. understand how to collect and verify data from different sources
- b2. Interpret data to diagnose prevalent problems in the Clinical Pharmacology

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform recent advanced technological methods in collection, analysis and interpretation of data

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use appropriate computer program packages.
- d2. Use of different sources for information and knowledge about biostatistics.

3. Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Recent advances in collection, analysis and interpretation of data	6	3	3
-Details of Tests of significance: Proportion test	6	3	3
Chi-square test	6	3	3
Student T test	6	3	3
Paired T test	6	3	3
-Correlation	4	2	2
-Regression	6	3	3
-ANOVA test	4	2	2
-Discrimination analysis	6	3	3
Factor analysis	4	2	2
- parametric and non parametric tests	6	3	3
Total	60	30	30
Total credit hours	3	2	1

4. Teaching and Learning Methods

- 4.1- Lectures
- 4.2- Practical sessions
- 4.3- Computer search assignments
- 4.4- Computer application

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Intellectual skills, Knowledge, General transferable skills
5.4Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1.....Final written exam	Week: 24
Assessment 2.....Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course
Assessment 4	Computer search assignment performance throughout the course

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Formative only assessments: attendance and absenteeism and Computer search assignments performance.

6. List of References

6.1- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

6.2- Recommended Books

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.

2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.

3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

6.3- Periodicals, Web Sites, ...etc

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

Facilities Required for Teaching and Learning:

- 1- ADEQUATE INFRASTRUCTURE: including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, good source of aeration, bathrooms, good illumination, and safety & security tools.
- 2- TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, colour and laser printers.

Course Coordinator: Dr/Foad Metry Atya

Head of Department: Prof/ Ahmed Fathy Hammed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for Research methodology for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. Department offering the program: Clinical Pharmacology department
4. Department offering the course: Community Medicine and public Health department
5. Academic year/ first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Research methodology for MD degree in Clinical Pharmacology

Code : COM 0505-300

Total hours

Title	Lecture	Practical	Total	Credit
Research methods	30	30	60	3

B. Professional Information

1. Overall Aims of Course

- To influence the students to adopt an analytical thinking for evidence based medicine
- To use precisely the research methodology in researches

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define the recent advances of screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests.
- a2. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.
- a3. Describe the study design, uses, and limitations.
- a4. Mention the recent advances of principles, methodologies, tools and ethics of scientific research.
- a5. Explain the strategies and design of researches.
- a6. Describe bias and confounding.
- a7. Describe sampling techniques and list advantages of sampling
- a8. Identify principles of evidence based medicine.

b) Intellectual Skills

By the end of the course, the student is expected to be able to:

- b1. Conduct research studies that add to knowledge.
- b2. Formulate scientific papers in the area of Clinical Pharmacology
- b3. Innovate and create researches to find solutions to prevalent problems in the area of Clinical Pharmacology
- b4. Criticize researches related to Clinical Pharmacology

c) Professional and Practical Skills:

By the end of the course, the student is expected to be able to:

- c1. Master the basic and modern professional skills in conducting researches in the area of Clinical Pharmacology.
- c2. Design new methods, tools and ways of conducting researches. .

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use of different sources for information and knowledge to serve research.
- d2. Work coherently and successfully as a part of a team and team's leadership in conducting researches and field studies.

3. Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Details of epidemiological studies (case control, cohort and cross sectional)	8	4	4
Clinical trials, Quasi experimental study	6	3	3
Bias and errors	6	3	3
Setting a hypothesis	6	3	3
Recent advances in screening	6	3	3
- Evidence – based Medicine: Concept and examples	4	2	2
Applicability	4	2	2
Scientific writing: A protocol	4	2	2
A curriculum	4	2	2
Setting an objective	2	1	1
- Critical thinking	2	1	1
Formulation of papers	8		
Total	60	30	30
Credit hours	3	2	1

4. Teaching and Learning Methods

4.1- Lectures.

4.2- Computer search assignments

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Intellectual skills, Knowledge, General transferable skills
5.4Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1 Final written exam

Week: 24

Assessment 2 Final Structured Oral Exam

Week: 24

Assessment 3 Attendance and absenteeism throughout the course

Assessment 4 Computer search assignment performance throughout the course

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course

Computer search assignment performance throughout the course

6. List of References

6.1- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

6.2- Recommended Books

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.

2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.

3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

6.3- Periodicals, Web Sites, ...etc

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

7. Facilities Required for Teaching and Learning:

1. ADEQUATE INFRASTRUCTURE: including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, good source of aeration, bathrooms, good illumination, and safety & security tools.
2. TEACHING TOOLS: including screens, computers including cd (rw), data shows, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.

Course Coordinator: Dr/Foad Metry Atya

Head of Department: Prof/ Ahmed Fathy Hammed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for New in Clinical Pharmacology of psychology for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: New in Clinical Pharmacology of psychology for MD degree in Clinical Pharmacology

Code: PHA 0505-300

Total hours

Title	Lecture	Practical	Total	Credit
New in Clinical Pharmacology of psychology	60	-	60	4

B. Professional Information

1. Overall Aims of Course

- To influence the students to adopt an analytical thinking for new in Clinical Pharmacology of psychology

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of psychotropic drugs
- a2. Describe psychotropic drugs
- a3. Explain the mechanism of action of psychotropic drugs
- a4. Interpret the pharmacological effect of psychotropic drugs
- a5. Describe mechanism of action, side effects, drug interactions
- a6. Summarize the new of psychotropic drugs.

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between different groups of psychotropic drugs
- b2. Join between clinical picture of the disease and pharmacological effects.
- b3. Determine the pharmacokinetic of different psychotropic drugs.

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for psychotropic drugs.
- c2. Evaluate and develop methods and tools existing in the psychotropic drugs
- c3. Diagnose the clinical picture of depression, mania, schizophrenia and anxiety.

c4. Detect association and causation of drug interaction among different groups.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
Anxiolytic and hypnotic drugs	15	15	
Antipsychotic drugs	15	15	
Antidepressant drugs	15	15	
Lithium and other mood-stabilizing drugs	15	15	
Total	60	60	
Credit	4	4	

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2- Computer search assignments

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Essential Books (Text Books)

1-Maxy-Rosenau Public health and preventive medicine, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

6.2- Recommended Books

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.

2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.

3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

6.3- Periodicals, Web Sites, ...etc

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

7. Facilities Required for Teaching and Learning:

1. Adequate conditioned space for staff and assistants.
2. Adequate conditioned teaching facilities.
3. Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for Drugs Abuse and addiction for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ first part
7. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Drugs abuse and addiction for MD degree in Clinical Pharmacology

Code : PHA 0505-300

Total hours

Title	lecture	practical	total	credit
Drugs abuse and addiction	60	-	60	4

B. Professional Information

1. Overall Aims of Course

- To influence the students to adopt an analytical thinking for drugs abuse and addiction

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of drugs abuse and addiction.
- a2. Describe drugs abuse and addiction.
- a3. Explain the mechanism of action of drugs abuse and addiction.
- a4. Interpret the pharmacological effect of drugs abuse and addiction.
- a5. Describe mechanism of action, side effects, drug interactions
- a6. Summarize the new of drugs abuse and addiction.

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between different groups of drugs abuse and addiction.
- b2. Join between clinical picture of the disease and pharmacological effects.
- b3. Determine the pharmacokinetic of different drugs abuse and addiction.

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for drugs abuse and addiction.
- c2. Evaluate and develop methods and tools existing in the drugs abuse and addiction.
- c3. Diagnose the clinical picture of abused persons.

c4. Detect association and causation of drug interaction among different groups.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
Introduction to drug of addiction and abuse	15	15	-
Adaptive processes and drug abuse	15	15	-
Drug dependence, CNS depressants, CNS stimulants	15	15	-
Alcohols abuse, Marijuana, Hallucinogen Phencyclidine poisoning (PCO)	15	15	-
Total	60	60	
Credit	4	4	

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2- Computer search assignments

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attending and absenteeism.	- General transferable skills, intellectual skills
5.2- Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3- Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Course Notes

- Department notes, lectures and handouts

6.2- Essential Books (Text Books)

- Goodman and Gilman (2001). Manual of Clinical Pharmacology and therapeutics.
Mc Graw Hill

6.3- Periodicals, Web Sites, etc

7. Facilities Required for Teaching and Learning:

1. Adequate conditioned space for staff and assistants.
2. Adequate conditioned teaching facilities.
3. Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for New events in anti-infective and anticancer agents for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: New events in anti-infective and anticancer agents for MD degree in Clinical Pharmacology

Code : PHA 0505-300

Total hours

Title	Lecture	Practical	Total	credit
New events in anti-infective and anticancer agents	60	-	60	4

B. Professional Information

1. Overall Aims of Course

- To influence the students to adopt an analytical thinking for new events in anti-infective and anticancer agents

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of new events in anti-infective and anticancer agents
- a2. Describe new events in anti-infective and anticancer agents
- a3. Explain the mechanism of action of new events in anti-infective and anticancer agents
- a4. Interpret the pharmacological effect of new events in anti-infective and anticancer agents
- a5. Describe mechanism of action, side effects, drug interactions
- a6. Summarize the new events in anti-infective and anticancer agents

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between different groups of new events in anti-infective and anticancer agents
- b2. Join between clinical picture of the disease and mechanism of action different drug groups.
- b3. Determine the pharmacokinetic of different new events in anti-infective and anticancer agents

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for new events in anti-infective and anticancer agents
- c2. Evaluate and develop methods and tools existing in the new events in anti-infective and

anticancer agents

c3. Diagnose the clinical picture of cancer and infective diseases.

c4. Detect association and causation of drug interaction among different groups.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

d1. Use web for collecting data.

d2. Utilize computers in conducting researches.

d3. Manage a group of data entry

d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
General principal of anti-microbial drugs, Chemotherapy of tuberculosis	15	15	
Chemotherapy of protozoal infections, helminth infections	15	15	
Anti fungal agents, Antiviral agents	15	15	
Chemotherapy of neoplastic disease	15	15	
Total	60	60	
Credit	4	4	

4. Teaching and Learning Methods

4.1- Lectures.

4.2- practical lessons

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Course Notes

-Department notes, lectures and handouts

6.2- Essential Books (Text Books)

6.3- Periodicals, Web Sites, etc

- Goodman and Gilman (2001). Manual of Clinical Pharmacology and therapeutics. Mc Graw Hill

7. Facilities Required for Teaching and Learning:

- 1- Adequate conditioned space for staff and assistants.
- 2- Adequate conditioned teaching facilities.
- 3- Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for Advanced research in Clinical Pharmacology of mouth and teeth for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Advanced research in Clinical Pharmacology of mouth and teeth for MD degree in Clinical Pharmacology

Code : PHA 0505-300

Title	Lecture	Practical	Total	Credit
Advanced research in Clinical Pharmacology of mouth and teeth	60		60	4

B. Professional Information

1. Overall Aims of Course

-To influence the students to adopt an analytical thinking for advanced research in Clinical Pharmacology of mouth and teeth

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of Clinical Pharmacology of mouth and teeth.
- a2. Describe Clinical Pharmacology of mouth and teeth.
- a3. Explain the mechanism of action of psychotropic drugs.
- a4. Interpret the pharmacological effect of Clinical Pharmacology of mouth and teeth.
- a5. Describe mechanism of action, side effects, drug interactions.
- a6. Summarize the new of Clinical Pharmacology of mouth and teeth.

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between different groups of Clinical Pharmacology of drugs used in mouth and teeth disease.
- b2. Join between clinical picture of the disease and pharmacological effects of drugs.
- b3. Determine the pharmacokinetic of different drug groups.

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for Clinical Pharmacology of mouth and teeth drugs.
- c2. Evaluate and develop methods and tools existing in the mouth and teeth drugs.
- c3. Detect association and causation of drug interaction among different groups.
- c4. Detect association and causation between diseases of mouth and teeth and drugs used in their treatments.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
Treatment for chronic adult periodontitis	30	30	
Action plan for periodontal health	30	30	
Total	60	60	
Credit	4	4	

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2-Computer search assignments

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Course Notes

- Department notes, lectures and handouts

6.2- Essential Books (Text Books)

- Goodman and Gilman (2001). Manual of Clinical Pharmacology and therapeutics. Mc Graw Hill

6.3- Periodicals, Web Sites, etc

7. Facilities Required for Teaching and Learning:

1. Adequate conditioned space for staff and assistants.
2. Adequate conditioned teaching facilities.
3. Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for Methods to evaluate and develop drugs for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

- 1- Program(s) on which the course is given: MD degree in Clinical Pharmacology
- 2- Major or minor element of programs: minor
- 3- Department offering the program: Clinical Pharmacology department
- 4- Department offering the course: Clinical Pharmacology department
- 5- Academic year/ first part
8. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Methods to evaluate and develop drugs for MD degree in Clinical Pharmacology

Code : PHA 0505-300

Title	Lecture	Practical	Total	Credit
Methods to evaluate and develop drugs	60		60	4

B. Professional Information

1. Overall Aims of Course

-To influence the students to adopt an analytical thinking for Methods to evaluate and develop drugs

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of drugs evaluation
- a2. Describe Methods to evaluate and develop drugs
- a3. Describe Methods to evaluate and develop drugs
- a4. Summarize the important of Methods to evaluate and develop drugs.

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between different Methods to evaluate and develop drugs
- b2. Join between clinical picture of the disease and pharmacological effects.
- b3. Determine the Methods to evaluate and develop drugs.

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for Methods to evaluate and develop drugs
- c2. Evaluate and develop methods and tools existing in Methods to evaluate and develop drugs

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. 3- Contents

Topic	No. of hours	Lecture	Practical
Background of methods to evaluate and develop drugs	15	15	
Chemical assay	15	15	
microbiological assay	15	15	
Documentation of the method establishment	15	15	
Total	60	60	

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2-Computer search assignments

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Course Notes

- Department notes, lectures and handouts

6.2- Essential Books (Text Books)

- Goodman and Gilman (2001). Manual of Clinical Pharmacology and therapeutics. Mc Graw Hill

6.4- Periodicals, Web Sites, etc

7. Facilities Required for Teaching and Learning:

1. Adequate conditioned space for staff and assistants.
2. Adequate conditioned teaching facilities.
3. Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for Drugs economics for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. 3.Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ first part
9. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Drugs economics for MD degree in Clinical Pharmacology

Code: PHA 0505-300

Title	Lecture	Practical	Total	Credit
Drugs economics	60		60	4

B. Professional Information

1. Overall Aims of Course

-To influence the students to adopt an analytical thinking for Drugs economics

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of Financing of Drug Treatment Services, Health Insurance
- a2. Describe Payment Mechanisms
- a3. Explain the Alternative Delivery Systems and Managed Care
- a4. Interpret the Drug policy
- a5. Describe Cost-Benefit, Cost-Effectiveness and Cost-Utility Analysis
- a6. Summarize the Habit, Addiction, Consumption, and Demand for Illegal Drugs

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between Cost-Benefit, Cost-Effectiveness and Cost-Utility Analysis
- b2. Join between Habit, Addiction, Consumption, and Demand for Illegal Drugs.
- b3. Determine the Alternative Delivery Systems and Managed Care.

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for Financing of Drug Treatment Services, Health Insurance.
- c2. Evaluate Alternative Delivery Systems and Managed Care
- c3. Diagnose the Cost of Drug Treatment
- c4. Detect Habit, Addiction, Consumption, and Demand for Illegal Drugs.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
1. Financing of Drug Treatment Services, Health Insurance	7	7	
2. Payment Mechanisms	8	8	
3. Alternative Delivery Systems and Managed Care	8	8	
4. Cost-Benefit, Cost-Effectiveness and Cost-Utility Analysis	7	7	
5. Cost of Drug Treatment	8	8	
6. Methodological Research	8	8	
7. Habit, Addiction, Consumption, and Demand for Illegal Drugs	7	7	
8. Drug policy	7	7	
Total	60	60	
Credite	4	4	

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2- Computer search assignment

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Course Notes

Department notes, lectures and handouts

6.2- Essential Books (Text Books)

- Goodman and Gilman (2001). Manual of Clinical Pharmacology and therapeutics. Mc Graw Hill

6.3- Periodicals, Web Sites, etc

7. Facilities Required for Teaching and Learning:

1. Adequate conditioned space for staff and assistants.
2. Adequate conditioned teaching facilities.
3. Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for Alternative therapy for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: New events in anti-infective and anticancer agents for MD degree in Clinical Pharmacology

Code : PHA 0505-300

Title	Lecture	Practical	Total	Credit
Alternative therapy	60	-	60	4

B. Professional Information

1. Overall Aims of Course

-To influence the students to adopt an analytical thinking for new events in alternative therapy

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of new events in Alternative therapy for autism
- a2. Describe new events in Alternative therapy cancer
- a3. Explain the mechanism of action of Alternative therapy rheumatoid arthritis
- a4. Interpret the pharmacological effect of Alternative therapy for kidney disease
- a5. Describe mechanism of action, side effects, drug interactions
- a6. Summarize the new events in Alternative therapy

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between different groups of new events in Alternative therapy
- b2. Join between clinical picture of the disease and mechanism of action different drug groups.
- b3. Determine the pharmacokinetic of different new events in Alternative therapy

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for new events in Alternative therapy

- c2. Evaluate and develop methods and tools existing in the new events in Alternative therapy
- c3. Diagnose the clinical picture of cancer diseases.
- c4. Detect association and causation of drug interaction among different groups.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
1. Introduction for Alternative therapy	7	7	
2. Alternative therapy for autism	8	8	
3. Alternative therapy cancer	7	7	
4. Alternative therapy rheumatoid arthritis	7	7	
5. Alternative therapy male sexual disease	8	8	
6. Alternative therapy female sexual disease	7	7	
7. Alternative therapy irritable bowel disease	8	8	
8. Alternative therapy for kidney disease	8	8	
Total	60	60	
Credit	4	4	

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2- Computer search assignment

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Course Notes

-Department notes, lectures and handouts

6.2- Essential Books (Text Books)

- Goodman and Gilman (2001). Manual of Clinical Pharmacology and therapeutics. Mc Graw Hill

6.3- Periodicals, Web Sites, etc

7. Facilities Required for Teaching and Learning:

- 1- Adequate conditioned space for staff and assistants.
- 2- Adequate conditioned teaching facilities.
- 3- Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for Advanced research in chromatography for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: New events in anti-infective and anticancer agents for MD degree in Clinical Pharmacology

Code : PHA 0505-300

Title	Lecture	Practical	Total	Credit
Advanced research in chromatography	60	-	60	4

B. Professional Information

1. Overall Aims of Course

-To influence the students to adopt an analytical thinking for new events in Advanced research in chromatography

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of new events in chromatography
- a2. Describe new events in clinical uses of chromatography
- a3. Explain the new events in clinical uses of chromatography
- a4. Summarize the Types of chromatography

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between different Types of chromatography
- b2. Join between clinical picture of the disease and clinical uses of chromatography

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for Types of chromatography
- c2. Evaluate and develop methods and tools existing in the new events in of chromatography

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
Introduction	20	20	
Types of chromatography	20	20	
Clinical uses of chromatography	20	20	
Total	60	60	
Credit	4	4	

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2- Computer search assignment

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Course Notes

-Department notes, lectures and handouts

6.2- Essential Books (Text Books)

- Goodman and Gilman (2001). Manual of Clinical Pharmacology and therapeutics. Mc Graw Hill

6.3- Periodicals, Web Sites, etc

7. Facilities Required for Teaching and Learning:

- 1- Adequate conditioned space for staff and assistants.
- 2- Adequate conditioned teaching facilities.
- 3- Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications advanced research in electric and electronic measurements for brain nerves and muscle activities for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: minor
3. Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ first part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: New events in anti-infective and anticancer agents for MD degree in Clinical Pharmacology

Code : PHA 0505-300

Title	Lecture	Practical	Total	Credit
advanced research in electric and electronic measurements for brain nerves and muscle activities	60	-	60	4

B. Professional Information

1. Overall Aims of Course

-To influence the students to adopt an analytical thinking for new events in advanced research in electric and electronic measurements for brain nerves and muscle activities

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of Physiology of CNS, muscles and nerves
- a2. Describe Neuroprotective treatment of hypoxic-ischemic injury
- a3. Explain the Ammonium ion content and electrical activity of the brain drugs
- a4. Mention 5-HT decreases contractile and electrical activities in lymphatic vessels

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Join between Ammonium ion content and electrical activity of the brain drugs
- b2. Determine the 5-HT decreases contractile and electrical activities in lymphatic vessels

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for advanced research in electric and electronic measurements for brain nerves and muscle activities Evaluate and develop methods and tools existing in the new events in anti-infective and anticancer agents
- c2. Diagnose the Ammonium ion content and electrical activity of the brain drugs

- c3. Detect association and causation of 5-HT decreases contractile and electrical activities in lymphatic vessels

d)General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
Physiology of CNS, muscles and nerves	15	15	
Ammonium ion content and electrical activity of the brain drugs	15	15	
Neuroprotective treatment of hypoxic-ischemic injury	15	15	
5-HT decreases contractile and electrical activities in lymphatic vessels	15	15	
Total	60	60	
Credit	4	4	

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2- Computer search assignments

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week: 24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Course Notes

-Department notes, lectures and handouts

6.2- Essential Books (Text Books)

- Goodman and Gilman (2001). Manual of Clinical Pharmacology and therapeutics. Mc Graw Hill

6.3- Periodicals, Web Sites, etc

7. Facilities Required for Teaching and Learning:

- 1- Adequate conditioned space for staff and assistants.
- 2- Adequate conditioned teaching facilities.
- 3- Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

Course Specifications for Clinical Clinical Pharmacology for MD degree in Clinical Pharmacology

Sohag University

Faculty of Medicine

1. Program(s) on which the course is given: MD degree in Clinical Pharmacology
2. Major or minor element of programs: Major
3. 3.Department offering the program: Clinical Pharmacology department
4. Department offering the course: Clinical Pharmacology department
5. Academic year/ second part
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: **Course Specifications for clinical Pharmacology for MD degree in Clinical Pharmacology**

Code : PHA 0505-300

Title	lecture	practical	total	Credit
Medical Clinical Pharmacology	420	750	1170	53

B. Professional Information

1. Overall Aims of Course

-To influence the students to adopt an analytical thinking for Medical Clinical Pharmacology

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the course, the student is expected to be able to:

- a1. Define terms of drugs of the CNS and GIT.
- a2. Describe drugs of the respiratory system
- a3. Explain the mechanism of action of drugs of ANS.
- a4. Interpret the pharmacological effect of autacoids.
- a5. Describe mechanism of action, side effects, drug interactions
- a6. Summarize the new general Clinical Pharmacology.
- a7. Define terms of oxidative stress
- a8. Describe CYP 450
- a9. Explain the reactive metabolites
- a10. Interpret the adverse drug reactions.
- a11. Summarize the new of advance Clinical Pharmacology.

b) Intellectual Skills

By the end of the course, the student is expected to be allowed to:

- b1. Compare between different groups of CNS drugs

- b2. Join between clinical picture of the disease and pharmacological effects.
- b3. Determine the pharmacokinetic of different ANS and GIT drugs.
- b4. Compare between different groups of anti oxidant drugs
- b5. Join between mechanism of action of drugs and their adverse drug reactions.
- b6. Determine the CYP 450.

c) Professional and Practical Skills:

By the end of the course, the student is expected to practice the following:

- c1. Perform a research proposal for ANS and GIT drugs.
- c2. Evaluate and develop methods and tools existing in the general Clinical Pharmacology.
- c3. Detect association and causation of drug interaction among different groups.
- c4. Perform a research proposal for advance Clinical Pharmacology.
- c5. Evaluate and develop methods and tools existing in the CYP 450.
- c6. Detect association and causation of drug interaction among different groups.

d) General and Transferable Skills:

By the end of the course, the student is expected to be able to:

- d1. Use web for collecting data.
- d2. Utilize computers in conducting researches.
- d3. Manage a group of data entry
- d4. Analyze and interpret data.

3. Contents

Topic	No. of hours	Lecture	Practical
Basic Clinical Pharmacology			
General Clinical Pharmacology	60	30	30
Drug acting on ANS	80	30	50
Autacoids	60	30	30
Drugs acting on CNS	90	35	55
Diuretics	60	25	35
Drug acting on cardiovascular system	80	35	45
Drug acting on blood	60	25	35
Drug acting on respiratory system	60	25	35
Drug acting on GIT	60	25	35
Advanced Clinical Pharmacology			
CYP 450.	80	30	50
adverse drug reactions	80	20	60
oxidative stress and anti oxidant drugs	80	30	50
reactive metabolites	80	20	60
Drug receptors	80	20	60
Neurotransmitters	80	20	60
Clinical pharmacokinetics	80	20	60
Total	1170	420	750

Credit	53	28	25
---------------	-----------	-----------	-----------

4. Teaching and Learning Methods

- 4.1- Lectures.
- 4.2- practical lessons.
- 4.3- Assignments
- 4.4- Attending and participating in scientific conferences, workshops, and group discussion to acquire the general and transferable skills needed.

5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5-OSPE	-Practical skills, intellectual skills
5.6 Computer search assignment	-General transferable skills, intellectual skills

Assessments schedule:

Assessment 1 log book (formative exam)	Week:80
Assessment 2 Final written exam	Week:96
Assessment 3 OSPE	Week:96
Assessment 4 ... Structured Oral Exam	Week:96

Weighting of Assessments

- Final Written Examination. Separate exam.
- Passing in the written exam is a condition to attend the following exams:
- Structured Oral Exam. 50 %
 - OSPE 50 %

Total	100%
-------	------

Any formative only assessments Attendance and absenteeism throughout the course
Computer search assignment performance throughout the course

6. List of References

6.1- Essential Books (Text Books)

Goodman and Gilman (2016) Manual of Clinical Pharmacology and therapeutics. Mc Graw Hill, Katzung (2018),

6.2- Recommended Books

Clinical Pharmacology book, Assiut university.

6.3- Periodicals, Web Sites, etc

Clinical Pharmacology review

Exp Clinical Pharmacology and therapeutic

7. Facilities Required for Teaching and Learning:

Adequate conditioned space for staff and assistants.

Adequate conditioned teaching facilities.

Audiovisual Aids: Data show, overhead and slide projectors and their requirements

Course Coordinator: Dr/Sanaa Abd Elaal

Head of Department: Dr/Sanaa Abd ElAal

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018