إعتماد توصيف مقررات برنامج الدكتوراه فى الأمراض العصبية

نقر نحن الموقعون على هذا أدناه أن توصيف وثيقة البرنامج التعليمى لدرجة الدكتوراه فى الأمراض العصبية والمقررات الدراسية المكونة له قد تم وضعها بمعرفة الأقسام المعنية

م	اسم المقرر	اسم منسق المقرر	التوقيع	اسم رئيس القسم	التوقيع
١.	الاحصاء الطبي والكمبيوتر	د./ أحمد فتحي حامد		د./ ايمان عبد الباسط محمد	
٢.	أساليب البحث العلمي	د./ أحمد فتحي حامد		د./ ايمان عبد الباسط محمد	
٣.	التقارير الطبية الأولية	د./ سهير على محمد		د./مها عبد الحميد هلال	
٤.	فسيولوجيا	د./ نوال بدوي على		أ.د./ جلال محمد عبد القادر	
٥.	علم الوراثة والبيولوجيا الجزئية	د./ عبير شنيف محمد		أ.د./ أحمد حسن عبد العزيز	
٦.	الأمراض العصبية	د./ محمد عبد المنعم		أ.د./غريب فاوي محمد	

وكيل الكلية للدراسات العليا

عميد الكلية

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 Medical Doctorate Degree of Neurology

Sohag University **Faculty of Medicine**

A. Basic Information

1. Program Title: MD in Neurology
2. Program Type: Single
3. Faculty: Faculty of Medicine
4. Department: Department of Neurology and psychiatry.
5. Coordinator: Prof. Gharib Fawi Mohammed
6. Assistant coordinator: Alamir Bassiouny Yossef Mohamed
7. External Evaluator: Prof. Saher Hashim
8. Last date of program specifications approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013.

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 neurology through providing:

1. Recent scientific knowledge essential for the mastery of practice of neurology according to the international standards.
2. Skills necessary for proper diagnosis and management of patients in the field of neurology including diagnostic, problem solving and decision making.
3. Ethical principles related to the practice in this specialty.
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 post graduate:

1. Efficient in carrying out the basics and advances in methodologies of scientific research in Neurology.
2. The continuous working to add new knowledge in his field.
3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the specialized 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 his specialty.
6. Determination of the professional problems 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:

By the end of the program, the student is expected to gain the knowledge and understanding of:

a1. Describe how to explain various neurological terms to medicals & non-medicals.
a2. Classify the various neurological disorders
a3. Mention the common and recent theories and factors explaining the etiology in various neurological disorders.
a4. Mention the recent advances in therapeutic options in various neurological diseases
a5. Mention various neurophysiological diagnostic tools
a6. Mention immunological aspects in different neurological diseases
a7. List the basics of neuroplasticity and neuroprotection
a8. Mention neurogenetics and how to use it in genetic counseling
a9. List the various neurological disorders in pediatric population
a10. Mention the fundamental ethical considerations in the field of scientific neurological research.
a11. Mention the ethical and legal aspects of professional practice in neurology.
a12. List the principles and fundamentals of ethics and legal aspects of professional practice in the field of neurology
a13. Write a competent and professional proposal for scientific research in neurological topics.
a14. Describe the basic diagnostic criteria in neurological disorders.
a15. List the common differential diagnosis in various neurological disorders.
a16. Mention the common interventional therapeutic methods in handling neurological emergencies and neurological disorders.
a17. Mention the known good & bad prognostic factors in common neurological disorders.
a18. Mention of the impact of professional practice on the environment and the methods of environmental development and maintenance
a19. List the recent advances in biostatistics and computer.
a20. Enumerate the principles, methods and steps of conducting scientific researches

b) Intellectual Skills

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

b1. Interpret data acquired through history taking to reach a provisional diagnosis in neurology
b2. Select from different diagnostic alternatives the one that help reaching a final diagnosis in neurology problems
b3. Conduct research studies that adds to knowledge
b4. -Formulate scientific papers in the area of neurology
b5. Assess risk in professional practice in the field of neurology
b6. Plan to improve performance in the field of neurology
b7. Identify neurological problems and find solutions.
b8. Have the ability to innovate nontraditional solution to neurological problems
b9. Manage scientific discussion based on scientific evidences and proofs.
b10. Collect and verify data from different sources
b11. Interpret data to diagnose prevalent neurological problems in the community, using various epidemiological strategies and use it for titration and conclusion
b12. Criticize researches related to neurology
b13. Innovate and create researches to find solutions to prevalent neurological problems.

c) Professional and Practical Skills

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

c1. Mastery of the basic and modern professional clinical skills in the area of neurology.
c2. Write and evaluation of medical reports.
c3. Evaluate and develop methods and tools existing in the area of neurology
c4. Perform different neurophysiological methods (e.g NCS ,EMG,EEG and evoked potentials)
c5. Train junior staff through continuous medical education programs
c6. Design new methods, tools and ways of professional practice.
c7. Perform recent advanced technological methods in collection, analysis and interpretation of data and in management of prevalent neurological problems

d) General and Transferable Skills

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

d1. Present reports in seminars effectively
d2. Use appropriate computer program package
d3. Teach others and evaluate their performance.
d4. Assess himself and identify his personal learning needs.
d5. Use different sources for information and knowledge.
d6. Work coherently and successfully as apart of a team and team's leadership.
d7. Manage scientific meetings according to the available time.

4. Academic Standards

Suggested NARS-based ARS

Sohag Faculty of medicine adopted the general National academic Referenc 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 decree NO.6854, in it's session NO177 dated: 18/5/2009 based on these NARS; Academic reference standards (ARS) were suggested for this program. These ARS were revised by external evaluator and approved by the faculty council decree No.7528 in session No 191 dated 15/3/2010. . The adoption of NARS and the suggested ARS were approved by University council degree No 587, in its cession No.60. dated 26-12-2011.

5. Curriculum Structure and Contents

5.a- Program duration 7 semester (3.5)

5.b- Program structure

5.b.i- No. of hours per week:

	hours /week		
Subject	Lectures	Practical	Clinical
First Part:			
• Bio Statistics & Computer	**2**	**1**	
• Research Methodology	**2**	**1**	
• Primary medical reports	**1**	**1**	
• Applied physiology of central nervous system	3	-	
• Genetics and molecular biology	3	-	
Second Part:			
• Neurology	2.5	3.5	

code	Item		No	%
b.i	Total credit hours	Compulsory	90	100
		Elective	0	0
		Optional	0	0
b.iii	credit hours of basic sciences courses		7	7.8
b.iv	credit hours of courses of social sciences and humanities		0	0
b.v	credit hours of specialized courses:		60	66
b.vi	credit hours of other course			
b.vii	Practical/Field Training		8	8.9%
b.viii	Program Levels (in credit-hours system): Level 1: 1st part Level 2: 2nd Part Level 3: Thesis		 15 52 15	 16.7 57.8 16.7

6. Program Courses

6.1- Level/Year of Program…1……. Semester…1…..

First Part:

Semester…1…..

a. Compulsory

Course Title	Total No of hrs	No. of hours /week			Program ILOs Covered (By No.)
		Lect.	Lab.	clinical	
Bio Statistics & Computer	60	2	2	--	a19,b9,b10,b11,c7,d2,d5
Research Methodology	60	2	2	---	a10, a13- a19,a20-b3-b4-b12-b13-,c1,c6,d5-d6
Primary medical reports	45	1	2	---	a11, a12 b3 ,c1, c2d5

Applied physiology of central nervous system	45	3	---	---	a1,b1,c1,d5
Genetics and molecular biology	45	3	---	---	a8,b2,c1,d5

Second Part:

a. Compulsory

Course Title	No. of hours	No. of hours /week			Programme ILOs Covered (By No.)
		Lect.	Lab.	clinical	
Neurology	351	2.5		3.5	a2,a3,a4,a5,a6,a7,a9,a14,a15,a16,a17,B1,b2,3,b5,b6,b7,b8,b11,c1,c2,c3,c4,c5,c6,d1,d3,d4,d5,d6,d7

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 bylaw Regulatory rules of Sohag Faculty of Medicine approved by the ministerial decree No. (44), dated 6/1/2010.

II- Specific Requirements

- Master degree in Neurology and Psychological Medicine 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 Neurology and Psychological Medicine 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 ≥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 علمى موسع**	**6**
Training courses	**دورات تدريبية**	**12/ day**
Conference attendance	**حضور مؤتمرات علمية** **داخلى** **خارجة**	 **12/day** **18/day**
Thesis discussion	**حضور مناقشات رسائل**	**6**
Workshops	**حضور ورش عمل**	**12/day**
Journal club	**ندوة الدوريات الحديثة**	**6**
Seminars	**لقاء علمى موسع**	**6**
Morbidity and Mortality conference	**ندوة تحليل المخاطر المرضية أوالوفاة**	**6**
Self education program	**برنامج التعليم الذاتي**	**6**

- 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+ OSPE
- Research Methodology: Written Exam (2 hours) + structured oral Exam+ OSPE
- Primary medical reports: Written Exam (2 hour) + Structured oral Exam+ OSPE
- Applied physiology: Written Exam (2hours) + Structured oral Exam
- Genetics and molecular biology: Written Exam (2hours) + Structured oral Exam

Part II:
- Neurology: Two Written Exams (3 hours for each) + OSCE + Structured oral Exam + one written exam containing commentary (1.5 hours).

10. Evaluation of Program

Evaluator	Tool	Sample
1- Senior students	Questionnaire	5
2- Alumni	Questionnaire	2
3- Stakeholders (Employers)	Questionnaire	10
4-External Evaluator(s) (External Examiner(s))	Report	1
5- Other		

Course specification of applied biostatistics and Computer in MD degree in neurology

SOHAG University **Faculty of MEDICINE**

1. Program(s) on which the course is given: MD neurology
2. Major or minor element of programs: minor
3. Department offering the program: Neurology and psychiatry
4. Department offering the course: Community Medicine and public Health department
5. Academic year /level/: 1st part
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

A. Basic Information

Title: Course specification of applied biostatistics and Computer and in MD degree in neurology
Code: COM 0518-300

Title	Lecture	Practical	Total	Credit
Biostatistics and computer	30	30	60	3

B. Professional Information

1. Overall Aims of Course

To use precisely applied biostatistics and Computer programs.

2. Intended Learning Outcomes of Courses (ILOs)

a) Knowledge and understanding:

By the end of the study the Graduate should be capable of:

a1. List 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 study the Graduate should be capable of:

b1. Manage scientific discussion with proper interpretation of statistical data
b2. Collect and verify data from different sources

b3. Interpret data to diagnose prevalent neurological problems in the community, using various epidemiological strategies and use it for titration and conclusion

c) Professional and Practical Skills:

By the end of the study the Graduate should be capable of:

c1. Perform recent advanced technological methods in collection, analysis and interpretation of data and in management of prevalent neurological problems and training junior

d) General and Transferable Skills:

By the end of the study the Graduate should be capable of:

d1. Use appropriate computer program package to manage a group of data entry and analyze and interpret data

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 hours	**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	- Knowledge, Iintellectual 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	%

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

6. List of references:

1) Essential books:

1-Maxy-Rosenau Public health and preventive medicine, Prentice – Hall International Inc. {Publisher: McGraw-Hill Medical; 15 edition (1 Oct 2007)}

2) Recommended books:

1- Dimensions of Community Health, Boston Burr Ridge Dubuque.
2- Short Textbook of preventive and social Medicine. Prentice-Hall International Inc.
3- Epidemiology in medical practice, 5th edition. Churchill Livingstone. New York, London and Tokyo.

3) Periodicals, Web Sites:

1. American Journal of Epidemiology
2. British Journal of Epidemiology and Community Health
3. WWW. CDC and WHO sites
4. http://www.freemedicaljournals.com

7. Facilities Required for Teaching and Learning

1-Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, and good source of aeration, bathrooms, and 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/Ahmed Fathy Hammed

Head of Department: Prof/Eman Abd El-Baset Mohammed

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

Course specification of Research methodology and in MD degree in neurology

SOHAG University **Faculty of MEDICINE**

1.Program(s) on which the course is given: MD neurology

2.Major or minor element of programs: minor

3.Department offering the program: Neurology and psychiatry

4.Department offering the course: Community Medicine and public Health department

5.Academic year /level/: 1st part

6.Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

A. Basic Information

Title: Course specification of research methodology and in MD degree in neurology
Cod: COM 0518-300
Total hours:

Title	Lecture	Practical	Total	Credit
Research methodology	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 study the Graduate should be capable of:

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. List 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. Write a competent and professional proposal for scientific research with focusing on spectrum of research methodology , terms of research methodology ,sampling methods and evidence based Medicine

b) Intellectual Skills

By the end of the study the Graduate should be capable of:

d1. Formulating scientific papers in the area of neurology with selection of appropriate research method and design
d2. Conduct research studies that adds to knowledge.
d3. Innovate and create researches to find solutions to prevalent neurological problems.
d4. Criticize researches related to neurology.

c) Professional and Practical Skills:

By the end of the study the Graduate should be capable of:

d1. Master the basic and modern professional skills in conducting researches in the area of neurology.
d2. Design new methods, tools and ways of conducting researchs.

d) General and Transferable Skills:

By the end of the study the Graduate should be capable of:

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 Applicability Scientific writing: A protocol A curriculum	4 4 4 4	2 2 2 2	2 2 2 2
Setting an objective - Critical thinking	2 2	1 1	1 1
Formulation of papers	8	4	4
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	- Knowledge, Iintellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

Assessment Schedule

Assessment 1Final written exam Week: 24
Assessment 2Final 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:

1) Essential books:

1-Maxy-Rosenau Public health and preventive medicine, Prentice – Hall International Inc. {Publisher: McGraw-Hill Medical; 15 edition (1 Oct 2007)}

2) Recommended books:

1- Dimensions of Community Health, Boston Burr Ridge Dubuque.
2- Short Textbook of preventive and social Medicine. Prentice-Hall International Inc.
3- Epidemiology in medical practice, 5th edition. Churchill Livingstone. New York, London and Tokyo.

3) Periodicals, Web Sites:

1-American Journal of Epidemiology
2-British Journal of Epidemiology and Community Health
3- WWW. CDC and WHO sites
4- http://www.freemedicaljournals.com

7. Facilities Required for Teaching and Learning

1-Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, and good source of aeration, bathrooms, and 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/Ahmed Fathy Hammed

Head of Department: Prof/Eman Abd El-Baset Mohammed

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

Course specification of Primary medical reports in MD degree in neurology

SOHAG University **Faculty of MEDICINE**

1. Program(s) on which the course is given: MD neurology
2. Major or minor element of programs: minor
3. Department offering the program: Neurology & Psychological medicine
4. Department offering the course: Forensic medicine and toxicology department
5. Academic year /level/: 1st part
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

A. Basic information

Title: Course specification of primary medical reports in MD degree in neurology
Code: For 0518- 300
Total hours:

Title	Lectures	Practical	Total	Credit
Primary Medical Reports	15	30	45	2

B. Professional information

1.<u>Aim of the course</u>:

- to prepare a neurology and psychiatry physician oriented with the ethical consideration in writing medical reports
- medico legal aspects

2. <u>Intended learning outcomes (ILOs):</u>

a) Knowledge and understanding

By the end of the study the Graduate should be capable of:

a1. List the ethical and legal aspects of professional practice in neurology.
a2. List the principles and fundamentals of ethics and legal aspects of professional practice in the field of neurology

b) Intellectual skills:

By the end of the study the Graduate should be capable of:

b1. Assess risk in professional practice in the field of neurology to patients and physician

c) Professional and Practical Skills:

By the end of the study the Graduate should be capable of:

c1. Mastery of the basic and modern professional clinical skills in the area of neurology and related science, and skills in the area of diagnosis and management of poisoning cases with neurological manifestations..
c2. Write medical reports according to basic items .

d) General and Transferable Skills:

By the end of the study the Graduate should be capable of:

d1. Use different sources for information and knowledge about primary medical reports.

3.Contents of the course:

Topic	No. of hours	Lecture	practical
Definition of poison, classification of poison and factors that influence toxicity	5	1.75	3.5
Diagnosis & Management of poisoning including: respiratory support, circulatory support and neurological support	5	1.75	3.5
toxicological sampling and permanent infirmity	5	1.75	3.5
How to write a toxicological report & How to write death certificate	5	1.5	3
Obligation of physicians (towards patients, colleagues, community)	5	1.5	3
Consent, and professional secrecy	5	1.5	3
Types of malpractice, and items of medical responsibility	5	1.75	3.5
Medicolegal aspects of organ transplantation, intersex states, euthanasia, assisted reproduction techniques	5	1.75	3.5
Ethical considerations of medical research involving human subjects	5	1.75	3.5
Total hours	**45**	**15**	**30**
Total credit hours	**2**	**1**	**1**

4.Teaching and Learning Methods:

4.1- Lectures

4.3- 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 assignment	-General transferable skills, intellectual skills

Assessment schedule:

1- Assessment 1: written examination week 24

2- Assessment 2: Structured Oral Exam week 24

3- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

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

Formative only assessments: attendance and absenteeism

6.List of references:

1) Essential books:

- practical forensic medicine
- forensic medicine and toxicology: principles and practice

2) Recommended books:

- **Concise text book of forensic medicine & toxicology,**
- Parikh's textbook of medical jurisprudence, forensic medicine and toxicology

3) Periodicals, Web Sites:

- www.forensicmed.co.uk/
- http://www.freemedicaljournals.com
- www.forensic-psych.com/

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, and 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. Soheir Ali Mohamed

Head of Department: Dr. Maha Abdel Hamed Hilal

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

Course specification of Medical Physiology in MD degree in neurology

SOHAG University **Faculty of MEDICINE**

1. Program(s) on which the course is given: MD neurology
2. Major or minor element of programs: minor
3. Department offering the program Neurology and psychiatry
4. Department offering the course: Medical Physiology department
5. Academic year /level/: 1st part
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

A. **Basic information**

Title: Course specification of physiology in MD degree in neurology

Code: PHY 0518-300

Title	Lecture	Practical	Total	Credit
Biostatistics and computer	45	-	45	3

B. Professional information

1. **Aim of the course:**

To prepare a neurology and psychiatry physician oriented with the physiology of the central nervous system, autonomic nervous system, muscle and nerve. In addition, graduates should have enough knowledge about the regulation of cerebral blood flow and conditions associated with increased intracranial tension.

2. **Intended learning outcomes (ILOs):**

a) Knowledge and understanding:

By the end of the study the Graduate should be capable of:

a1. Describe how to explain various neurological terms based on .
the physiology of central nervous system
the physiology of the autonomic nervous system
the physiology of muscle and nerve
regulation of cerebral blood flow and intracranial tension

b) Intellectual skills:

By the end of the study the Graduate should be capable of:

b1. Interpret data acquired through history taking and differentiate physiological from abnormal symptoms

c) Professional and Practical Skills:

By the end of the study the Graduate should be capable of:

c1. Mastery of the basic and modern professional clinical skills in the area of neurology and related science .

d) General and Transferable Skills:

By the end of the study the Graduate should be capable of:

d1. Use different sources for information and knowledge about CNS physiology.

3. Contents

Lectures	No. of hours	Lecture	Practical
I-the physiology of central nervous system	15	15	-
II-the physiology of the autonomic nervous system	5	5	-
III-the physiology of muscle and nerve	10	10	-
IV-regulation of cerebral blood flow	10	10	-
V-intracranial tension	5	5	-
Total	45	45	-
Total credit hours	**2**	**1**	**1**

4. Teaching and Learning Methods:

4.1- Lectures

4.3- 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 assignment	-General transferable skills, intellectual skills

Assessment schedule:

1- Assessment 1: written examination week 24

2- Assessment 2: Structured Oral Exam week 24

3- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

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

Formative only assessments: attendance and absenteeism

6. List of references:

1) Essential books:

- Guyton & Hall Textbook Of Medical Physiology 11th_Edition

2) Recommended books:

- Ganong_ Review of Medical Physiology - 23rd Ed

3) Periodicals, Web Sites:

1. www.ncbi.nlm.nih.gov
2. www.physoc.org
3. http://www.freemedicaljournals.com

7. Facilities Required for Teaching and Learning

1-Adequate infrastructure:

Including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, and good source of aeration, bathrooms, and 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. Hoda Mostafa

Head of Department: Dr/ Ahmed Mostafa

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

Course specification of Genetics and molecular biology in MD degree in neurology

Sohag University **Faculty of Medicine**

1. Program(s) on which the course is given: MD neurology
2. Major or minor element of programs: minor
3. Department offering the program: Neurology and psychiatry
4. Department offering the course: Medical Microbiology and immunology department
5. Academic year /level/: 1st part
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

A. Basic information

Title: Course specification of **Genetics and molecular biology** in MD degree in neurology
Code: MIC 0518 -300

Title	Lecture	Practical	Total	Credit
Genetics and molecular biology	**45**	----	**45**	**3**

B. Professional information

1. Aim of the course:

To prepare a neurology and psychiatry physician oriented with the **Genetics and molecular biology basics and their relations to neurological diseases**

2. Intended learning outcomes (ILOs):

a) Knowledge and Understanding:

By the end of the study the Graduate should be capable of:

a1. Mention neurogenetics and how to use it in genetic counseling

b) Intellectual Skills:

By the end of the course the student should have the ability to:

b1. Select from different diagnostic alternatives especially genetic diagnosis

c) Professional and Practical Skills:

By the end of the course the student should have the ability to:

c1. Mastery of the basic and modern professional clinical skills in the area of neurology and related science .

d) General and Transferable Skills:

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

d1. Use different sources for information and knowledge.

3. Contents

Topic	No. of hours	Lecture	Practical

Molecular biology 1. DNA structure	5	5	-
2. RNA structure	5	5	-
3. DNA replication	5	5	-
4. DNA transcription	5	5	-
5. DNA translation	5	5	-
6. uses of molecular biology technique	5	5	-
Genetics 1. Human genetics	10	10	-
2. gene therapy	5	5	-
Total	30	30	-
Total credit hours	3	3	-

4. Teaching and Learning Methods:

4.1- Lectures

4.3- 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 assignment	-General transferable skills, intellectual skills

Assessment schedule

1- Assessment 1: written examination week 24

2- Assessment 2: Structured Oral Exam week 24

3- Assessment of attendance & absenteeism throughout the course

Weighting of Assessments

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

Formative only assessments: attendance and absenteeism

6. List of references:

1) Essential books:

Introduction to molecular biology

Jawetz Medical Microbiology.

2) Recommended books:

Alberts Molecular Biology

3) Periodicals, Web Sites:

1. www.molecularstation.com/

2. www.biomedcentral.com/bmcmolbiol/
   http://www.freemedicaljournals.com

7. Facilities Required for Teaching and Learning

1-Adequate infrastructure:
including teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, and good source of aeration, bathrooms, and 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. Mamdoh M. Esmmat

Head of Department: Dr. Abeer Sh. Mohamed

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

Course specification of Neurology in MD degree in neurology

Sohag University **Faculty of Medicine**

1. Program(s) on which the course is given: MD neurology
2. Major or minor element of programs: major
3. Department offering the program: Neurology and psychiatry
4. Department offering the course: Neurology and psychiatry
5. Academic year /level/: 2nd part
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

A. Basic information

Title: Course specification of neurology in MD degree in neurology
Cod: NEU 0518-300

Title	Total	Practical	Lecture	Credit
Neurology	**1171**	720	451	53

B. Professional information

1. **Aim of the course:**

The aim of the course is to provide the postgraduate student with the advanced medical knowledge and skills essential for mastery of practice of neurology speciallity and necessary to provide further training and practice in the field of neurology through providing:

1. Recent scientific knowledge essential for mastery of practice of neurology according to international standars
2. Skills proper for diagnosis management of patients in the field of neurology including diagnostic .problem solving and decision making
3. Ethical principles related to the practice in this field
4. Active participation in community needs assessment and problems identification.
5. Maintenance of learning abilities necessary for continuous medical education.

2. Intended learning outcomes (ILOs):

a) knowledge and understanding:

By the end of the study the Graduate should be capable of:

a1. Classify the various neurological disorders
a2. Mention the common and recent theories and factors explaining the etiology in various neurological disorders.
a3. Mention the recent advances in therapeutic options in various neurological diseases
a4. Mention various neurophysiological diagnostic tools
a5. Mention immunological aspects in different neurological diseases
a6. Mention the basics of neuroplasticity and neuroprotection
a7. List the various neurological disorders in pediatric population

a8. Describe the basic diagnostic criteria in neurological disorders.
a9. List the common differential diagnosis in various neurological disorders.
a10. Mention the common interventional therapeutic methods in handling neurological emergencies and neurological disorders.
a11. Mention the known good & bad prognostic factors in common neurological disorders.
a12. Mention of the impact of professional practice on the environment and the methods of environmental development and maintenance

b) Intellectual skills:

By the end of the study the Graduate should be capable of:

b1. Interpret data acquired through history taking
b2. Select from different diagnostic alternatives the one that help reaching a final diagnosis in neurology problems
b3. Conduct research studies that adds to knowledge
b4. Plan to improve performance in the field of neurology
b5. Identify neurological problems and find solutions.
b6. Have the ability to innovate nontraditional solution to neurological problems

c) Professional and Practical Skills:

By the end of the study the Graduate should be capable of:

c1. Mastery of the basic and modern professional clinical skills in the area of neurology.
c2. Write and evaluation of medical reports.
c3. Evaluate and develop methods and tools existing in the area of neurology.
c4. Perform different neurophysiological methods (e.g NCS ,EMG,EEG and evoked potentials)
c5. Train junior staff through continuous medical education programs.
c6. Design new methods, tools and ways of professional practice.

d) General and Transferable Skills:

By the end of the study the Graduate should be capable of:

d1. Present reports in seminars effectively
d2. Teach others and evaluate their performance.
d3. Assess himself and identify his personal learning needs.
d4. Use different sources for information and knowledge.
d5. Work coherently and successfully as apart of a team and team's leadership.
d6. Manage Scientific meetings according to the available time.

3. Course contents

Topics	**Total hours**	**clinical**	**Lectures**
1. Clinical diagnosis	70	50	20
2. Investigation	32	20	12
3. Headache	32	20	12
4. Pediatric neurology	32	20	12
5. Development, degeneration, and regeneration of the central nervous system: neuroimmunology	30	20	10
6. Neuro-ophthalmology	35	20	15
7. Deafness, vertigo, and imbalance	32	20	12

8. Abnormalities of smell and taste	34	24	10
9. Lower cranial nerves and dysphagia	34	24	10
10. Polyneuropathy	40	30	10
11. Focal peripheral neuropathy	37	25	12
12. The motor neuron diseases	35	25	10
13. Muscle diseases	40	30	10
14. Head injury	35	25	10
15. Raised intracranial pressure, cerebral oedema, and hydrocephalus	35	25	10
16. Tumours of the brain and skull	30	20	10
17. Neurocutaneous syndromes	35	20	15
18. Spinal cord disorders	39	25	14
19. Cauda equina, spinal roots, and sphincter control	41	25	16
20. Epilepsy and other paroxysmal disorders in children	39	25	14
21. Seizures, epilepsy, and other episodic disorders in adults	39	25	14
22. Sleep and sleep disorders	35	25	10
23. Coma	42	30	12
24. Neuropsychological disorders, dementia, and behavioural neurology	40	**25**	15
25. Stroke, transient ischaemic attacks, and intracranial venous thrombosis	50	35	15
26. Vasculitis and collagen vascular disorders affecting the central nervous system	47	35	12
27. Multiple sclerosis and other demyelinating diseases	39	25	14
28. Cancer and the nervous system	55	35	20
29. Tremor, ataxia, and cerebellar disorders	39	25	14
30. Movement disorders	39	25	14
31. Meningitis	29	20	9
32. Encephalitis and other brain infections	34	25	9
33. Complications of systemic infections and immunizations	34	25	9
Neurogenetics	55	35	20
Neuroplasticity	55	35	20
Total	1171	720	451
Credit hours	53	23	30

4. Teaching and Learning Methods:

4.1- Lectures.

4.2- Clinical cases

4.3- 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-OSCE	-Practical skills, intellectual skills General transferable 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…..Final OSCE …….. Week:96

Assessment 4 … Final 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 %
- OSCE 50 %

Total 100%

6. List of references:

1) Essential books:

Brain 's Disease of The Nervous System (Michael Donaghy 12 edition 2009)

2) Recommended books:

- Adams & Victor's ,Principle of Clinical Neurology.
- Neurology in clinical practice.
- Clinical Neurology.
- Manual of neurologic therapeutics.
- Merret's Neurology.

3) Periodicals, Web Sites:

1. http://www.ncbi.nlm.gov .com
2. www.neurology.org

3. http://www.freemedicaljournals.com

7. Facilities Required for Teaching and Learning

1. **Adequate infrastructure**:
    a. Teaching places (teaching class, teaching halls, teaching laboratory), comfortable desks, and good source of aeration, bathrooms, and good illumination, and safety & security tools.
2. **Teaching tools**:
    a. 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: Prof. / Mohamed Abdalmonem

Head of Department: Prof/Gharib Fawi Mohamed

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