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# M.Pharm. Sci. Degree in Analytical Chemistry

# Program Report

(2018 – 2019)

# M.Pharm. Sci. Degree in Analytical chemistry

## A- Basic information:

**1- Program title:** M.Pharm. Sci. Degree in **Analytical chemistry**

**2- Program type:** Single

**3- Faculty/ University:** Faculty of Pharmacy, Zagazig University

**4- Department:** Analytical chemistry

**5- Program duration:** 3-5 years

**6- Coordinator: Prof. Dr. / Prof. Dr. Hisham Ezzat**

**7- External Evaluator:** Prof. Dr. Gamal Saleh (Department of Pharmaceutical Analytical Chemistry, Faculty of Pharmacy, Assiut University)

**8- Internal Evaluator:** Prof. Dr. Hisham Ezzat

**9- Year of operation**: 2018-2019

## B- Statistics:

1. **No. of students admitting the program (2014/2015):** 1
2. **Percentage of students admitting the program this year (relative to the previous year)**

| No. of students this year (2018-2019) | No. of students last year (2017-2018) |
|---|---|
| 4 | 3 |

3. **No. of students completing the program and as a percentage of those who started:**

| No. admitting the program | No. of students entered the exam | No. of students completed the program this year | Percentage |
|---|---|---|---|
| 1 | 1 | 1 | 100% |

4. **Grades: no. and percentage of each grade:** Non applicable

## C- Professional Information:

## Academic Standards:

## 1. Achievement of Programme Intended learning Outcomes.

i-The following table presents the courses taught in the program and the covered ILOs`:

| Course Code | Course Title | Credit hours | Program ILOs Covered |
|---|---|---|---|
| | General Courses: | | |
| M109 | Drug design | 4 | A5, D2 |
| M101 | Advanced Instrumental Analysis & chromatography I | 4 | A1, A4, B1,D2 |
| M106 | Physical chemistry | 4 | A1, A6, B1, B3, D2, D6, D9 |
| ME3 | Elective A<br>Good practice for analysis of drugs and quality control | 4 | A2,A8,B1, B5, D2, D4 |
| ME2 | Elective B<br>Drug Stability | 4 | A6, B7, D2,D4 |
| | Special Courses: | | |
| Asp1 | Potentiometry, voltammetry and electrochemical sensors | 4 | A1, A3, B7, B8, D2, D5, D6, D7. |
| Asp2 | Kinetic methods of analysis | 4 | A1, A6,A8, A9, B1, B2, D4, D8, D9. |
| Asp3 | Spectrophotometry | 4 | A1, A3, B7, D4, D5, D7. |
| | Thesis | 30 | A1, A3, A4, A7, A8, A9, B1, B2, B3, B4, |

| | | | |
|---|---|---|---|
| | | | B5, B6, B7, B8, C1, C2, C3, C4, D1, D2, D3, D4, D5, D6, D7 ,D8, D9. |

## 2. Achievement of Program Aims:

**a.** The aim as well as the intended learning outcomes of the program have been evaluated regarding; students achievement using different assessment methods as described below indicated high achievement % and complete achievement of program ILOs.

## 3. Assessment Methods:

| Method | item assessed |
|---|---|
| Written exam | **1- Courses:**<br>General : 20 credit hours(Compulsory: 12, Elective: (2x4) 8)<br>Special: (3courses x4 hours) 12 credit hours |
| Oral exam | |
| Activity | |
| Seminars | **2- Thesis:** 30 hours |
| Supervisors follow up reports | |
| One published article | |
| Thesis and oral presentation | |
| Pass | **3- General University Requirements:** 10 credit hours including:<br>a- TOEFL (400 units)<br>b- Computer course |

## 4. Student Achievement:

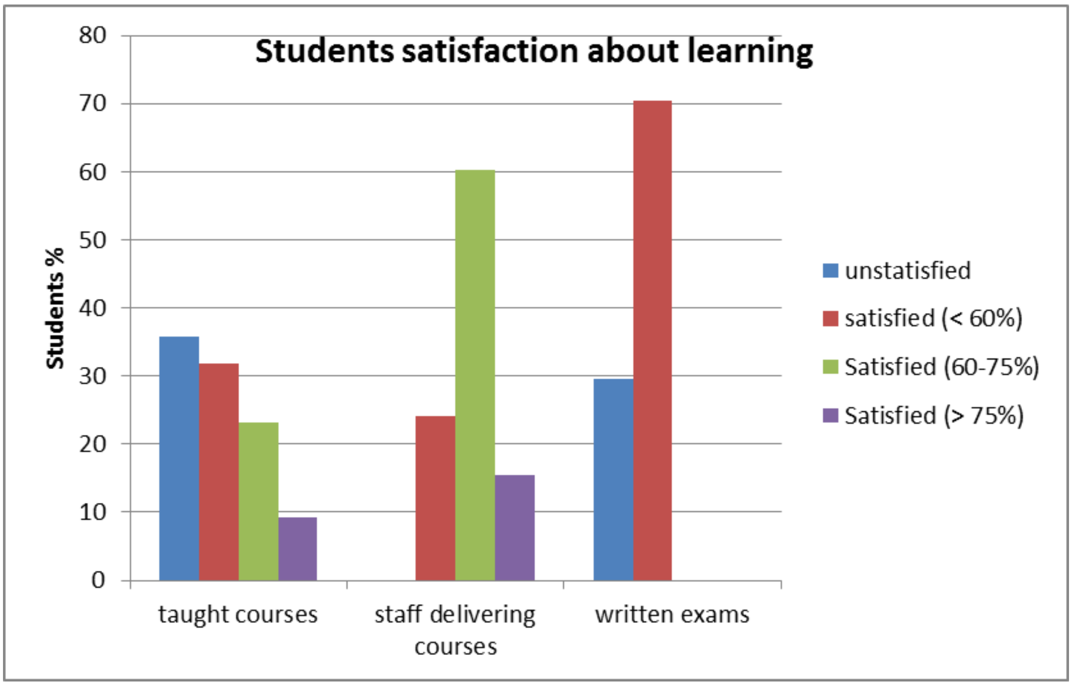
| Course Code | Course Title | Student 1 grades |
|---|---|---|
| **1. General Courses:** | | |
| **M109** | Drug design | 62 (D) |
| **M101** | Advanced Instrumental Analysis & chromatography I | 63 (D) |

| | | |
|---|---|---|
| **M106** | Physical chemistry | 77 (C+) |
| **ME3** | Elective A<br>Good practice for analysis of drugs and quality control | 80 (C+) |
| **ME2** | Elective B<br>Drug Stability | 89 (B+) |
| **2. Special courses:** | | |
| **Asp1** | Potentiometry, voltammetry and electrochemical sensors | 70 (C) |
| **Asp2** | Kinetic methods of analysis | 60 (D) |
| **Asp3** | Spectrophotometry | 60 (D) |
| | English language | TOEFL |
| | Computer course | √ |
| | Thesis eligibility report | √ |
| | One published article | √ |

## 5. Quality of learning opportunities:

### a. Quality of Teaching and Learning:

The quality of teaching and learning was evaluated through questionnaires distributed to all postgraduates students in the faculty. About 40- 45% of students were unsatisfied about the courses contents and their ability to develop intellectual skills. About 60% of the students were unsatisfied about the availability of the required references for the program. The overall questionnaire results are illustrated in the following figure:



## b. Effectiveness of student support system:

- Academic advisor is available for student guidance during courses registration as well as solving problems encountered during their learning experience.

## c. Availability and adequacy of program handbook.

In fact, a program handbook is available as a hard and soft copy demonstrating illegibility and registration requirements, list of courses, credit hours as well as teaching and assessment methods.

## d. Learning Resources:

- ***Adequacy of the number and specialty of the faculty members to the requirements of the program:***

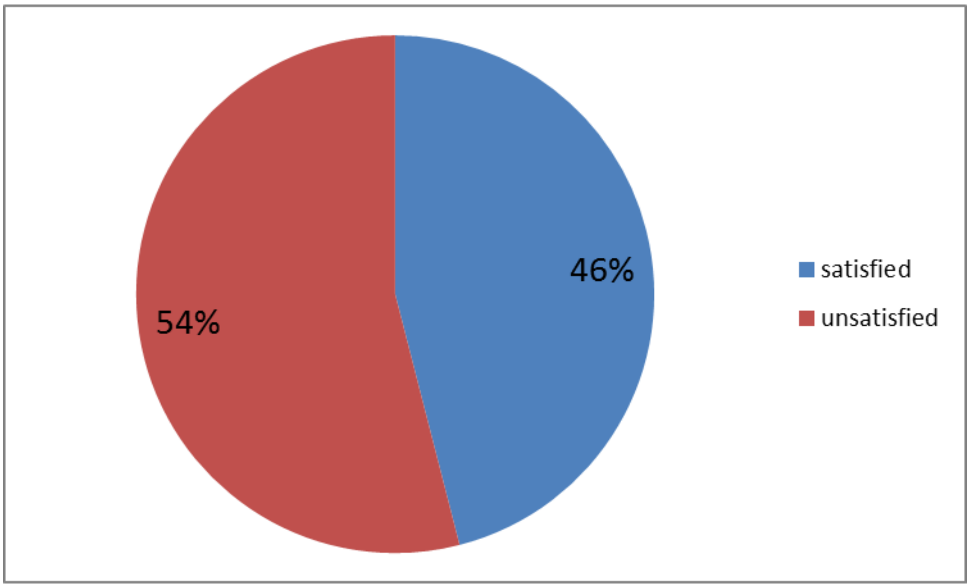
  - Number of department staff: 18
  - Number of master students: 16
  - Students/ staff ratio: 1.1:1

- Regarding teaching general courses: staffs from the department are participating in courses delivery
- Regarding teaching of special courses: staffs from the department are participating in courses delivery
  - Regarding thesis supervision: Two or three staff members of the department are selected according to the determined research point. Sometimes other staff members from other faculties of pharmacy or science of from the National

organization for drug control and research (NODCAR) participate in the supevision

- ***Adequacy of facilities for thesis completion:***

  - Students were unsatisfied about the available lab instruments, references and computer programs required for thesis preparation.



## 6. Quality Management.

### a. Availability of regular evaluation and revision system for the program:

Program specification of the academic year 2017-2018 was reviewed by:

Internal and external reviewers as well as reviewers of NAQAAE and all their comments are reviewed and considered in program specification 2018-2019.

**External reviewer comments:** revision and rephrasing program ILOs to emphasize the program aim regrading developing the students' research abilities

**Reviewers of NAQAAE:** Benchmark of program ILOs with similar international master program

### b. Effectiveness of the system:

- No administrative constraints present that may hinder achieving program ILOs.

- The faculty is seeking for increasing budget required for research to improve research facilities.

## c-Effectiveness of Faculty and University Laws and Regulations for Progression and Completion.

The system effectively supports the students in a manner that fairly facilitates the progression and completion of the degree.

## d. Faculty Response to Students and External Evaluations:

- Bench mark of the program ILOs was done with Master program in Analytical Chemistry, delivered by Birkbeck college, University of London, UK.

## 8. Proposals for Program development:

**a. Program structure:** Refer to the attached program specification and postgraduates bylaws.

## b. Courses, deletion, addition, modification

**c. Staff development:** encourage staff members for conference and workshop attendance

## 9. Action plan for improvement:

| Action | Person responsible | Completion date |
|---|---|---|
| Revision of program ILOs and make required changes | ● Program coordinator | 2019-2020 |
| Improve research facilities | • Vice dean for postgraduate studies and research | 2019-2020 |
| Update course contents | • Program coordinator | 2019-2020 |
| Organize different workshops to build up students research abilities | • FLDP center<br>• Faculty training unit | 2019-2020 |

- Vice dean of postgraduate studies………………………
- Program coordinator………………………………