

# CURRICULUM

### for pharmacy students

### academic year of 2023/2024

Szeged 2023

## **TABLE OF CONTENT**

| ACADEMIC CALENDAR                                           | 4   |
|-------------------------------------------------------------|-----|
| FACULTY OF PHARMACY DEAN'S OFFICE                           | 6   |
| THE INSTITUTES OF THE FACULTY                               | 8   |
| CO-FACULTY INSTITUTES AND DEPARTMENTS INVOLVED IN EDUCATION | .18 |
| MENTORS                                                     | .23 |
| INFORMATION OF STUDENT UNION OF FACULTY OF PHARMACY (HÖK)   | .24 |
| GENERAL INFORMATION REGARDING THE CREDIT SYSTEM             | .25 |
| EXTERNAL INTERNSHIPS OF PHARMACY STUDENTS                   | .29 |
| CURRENT CURRICULUM (OSZKGYO_N_EN_2022)                      | .31 |
| CURRENT CURRICULUM (OSZKGYO_N_EN_2017)                      | .43 |
| THESIS AND BOARD EXAM                                       | .51 |
| DOCTORAL SCHOOL OF PHARMACEUTICAL SCIENCES                  | .54 |

### Dear Students,

Before the academic year 2023/24, usual information is compiled, in which information and data about the current training at the Faculty of Pharmacy of the University of Szeged can be read. Here, information on the management of the Faculty, the staff of the Dean's Office and the faculty institutes, the lecturers of the institutes of the Albert Szent-Györgyi Medical School and the Faculty of Science and Informatics, the academic calendar of the 2023/24 academic year (with important deadlines); suggested study plan for pharmacy students, subjects to be admitted and their preconditions, as well as further useful information on the credit system, internships, dissertation and board exam can be found. The brochure also contains the recommended pharmacy training curriculum, allowing the students to complete the board exam in 10 semesters with a proportional study load and graduate as a PharmD if the suggested study plan is followed.

After graduating, the Faculty of Pharmacy offers additional opportunities to broaden students' professional knowledge: a degree in specialist pharmacist within the framework of postgraduate training and a scientific degree (PhD title) as a Doctoral School of Pharmaceutical Sciences student can be obtained. Students interested in scientific research are encouraged to participate in the Student Science Study Groups of the institutes, where they will be involved in research during their university studies.

We recommend the websites of the University of Szeged and the Faculty of Pharmacy (<u>https://u-szeged.hu/english</u> and <u>http://www.pharm.u-szeged.hu/english</u>), on which, in addition to current reports on university and faculty events, other helpful information can also be found.

The faculty members are confident that students' proficiency will develop with valuable knowledge in the 2023/24 academic year. We wish everyone many new experiences and a very successful academic year!

September 26, 2023

**Dr. Gerda Szakonyi** vice-dean for English education and the staff of the Registrar's Office

### UNNIVERSITY OF SZEGED FACULTY OF PHARMACY

### **ACADEMIC CALENDAR**

### 1st (Fall) semester

| Enrollment period:                                    | August 4 to September 9, 2023                          |
|-------------------------------------------------------|--------------------------------------------------------|
| Education period:                                     | September 11 to December 16, 2023                      |
| Examination Period:                                   | December 18 to 23, 2023                                |
|                                                       | January 2 to February 3, 2024                          |
| <b>Repeat Examination Period:</b>                     | January 5 to February 10, 2024                         |
| Pharmacy Internship 1.                                |                                                        |
|                                                       | July 10 to September 10, 2023                          |
| 9th semester before the Boar<br>September 11 to Decen | <sup>.</sup> d Exam:<br>nber 2, 2023 <i>(12 weeks)</i> |
| Exam period in 9th semester                           | before the Board Exam:                                 |
| December 4 to 23, 2022                                | 21                                                     |
| January 2 to 20, 2024                                 |                                                        |
| Repeat examination period in                          | n 9th semester before the Board Exam :                 |
| January 22 to 27, 2024                                |                                                        |
|                                                       |                                                        |

### 2nd (Spring) semester

| Education period:               | February 12 to May 18, 2024              |
|---------------------------------|------------------------------------------|
| Spring break:                   | March 28 to April 2, 2024                |
| No spring break for students of | completing their Professional Internship |

| Examination Period:      | May 21 to June 29, 2024       |
|--------------------------|-------------------------------|
| Repeat examination week: | July 1 – July 6, 2024         |
| Pharmacy Internship 2:   |                               |
|                          | February 1 to May 31, 2024    |
| Board Exam:              | June 4 to 18, 2024 (Expected) |

### Additional important deadlines:

Deadline for thesis submission:September 15, 2023 and March 11, 2024Guide: <a href="https://www.pharm.u-szeged.hu/english/for-students/thesis">https://www.pharm.u-szeged.hu/english/for-students/thesis</a>

Graduation ceremony:

June 29, 2024 (Friday) 10:00 - TIK

Expected deadlines of fellowship applications(call for applications: <a href="https://www.pharm.u-szeged.hu/english/for-students">https://www.pharm.u-szeged.hu/english/for-students</a>

| Excellence in Pharmacy                | Last day of the repeated examination period in the first semester |
|---------------------------------------|-------------------------------------------------------------------|
|                                       | July 31, 2024, in the second semester                             |
| National Higher Education Scholarship | July 1, 2024 (expectedly)                                         |

The dates may change depending on the decisions of the Faculty Council.

### FACULTY OF PHARMACY DEAN'S OFFICE

(6720 Szeged, Zrínyi u. 9., Phone: 62/54-5022, website: <u>http://www.u-szeged.hu/pharm</u>, E-mail: <u>czobor.anita@szte.hu</u>)

| Dean: | István Zupkó PhD, DSc                 |
|-------|---------------------------------------|
|       | Email: <u>zupko.istvan@szte.hu</u>    |
|       | Reception hours: by prior appointment |
|       |                                       |

Vice-deans: Zsolt Szakonyi PhD, DSc vice-dean for Scientific and Financial Affairs Email: <u>szakonyi.zsolt@szte.hu</u> Reception hours: by prior appointment

> **Tamás Sovány PhD** vice-dean for education Email: <u>sovany.tamas@szte.hu</u> Reception hours: by prior appointment

**Gerda Szakonyi PhD** vice-dean for English language education Email: <u>szakonyi.gerda@szte.hu</u> Reception hours: by prior appointment

**Dóra Rédei PhD** responsible for enrolment and public relations Email: <u>redei.dora.judit@szte.hu</u> Reception hours: by prior appointment

Head of the Dean's Office:

Anita Czobor (54-5022) lawyer - legal expert in EU law

Email: <u>czobor.anita@szte.hu</u>

HR Consultant: **Dóra Márvány (34-3072)** Email: <u>hr.pharm@szte.hu</u>

Academic Officers (Hungarian pharmacy program):

**Gábor Szatmári (34-3070)** (years 1 to 3) Email: <u>szatmari.gabor@szte.hu</u>

Katalin Varga (34-3071) (years 1 to 3) Email: <u>varga.katalin.ilona@szte.hu</u>

**Éva Tanács (54-4561)** (years 4 to 5) Email: <u>tanacs.eva@szte.hu</u> Academic Officers (English pharmacy program):

Katalin Tumó (34-2341) Email: <u>tumo.katalin@szte.hu</u>

**Ákos Varga (34-2340)** Email: <u>varga.akos@szte.hu</u>

Academic Officer (PhD students):

László Karácsonyi (54-6126) Email: <u>karacsonyi.laszlo@szte.hu</u> Reception hours:

Monday, Tuesday, Thursday, Friday: 9:30-12:00

Financial Administrator:

Margit Márkiné Sitkei (54-6125) Email: <u>markine.sitkei.margit@szte.hu</u> Reception hours: Monday to Friday: 9:00-12:00

Management Consultants:

**Renáta Kasza** (phone number to be specified later) Email: <u>kasza.renata.katalin@szte.hu</u>

Nóra Király (54-5749) Email: <u>kiraly.nora@szte.hu</u>

| Property Manager: | Zoltán Zámbó (54-4560)             |
|-------------------|------------------------------------|
|                   | Email: <u>zambo.zoltan@szte.hu</u> |

System Administrator:

**Norbert Huszta (54-6358)** Email: <u>huszta.norbert@gmf.u-szeged.hu</u>

Office Assistant: Erika Heidt

### THE INSTITUTES OF THE FACULTY

### **INSTITUTE OF PHARMACOGNOSY**

(6720 Szeged, Eötvös u. 6., 2nd floor, Phone: 54-5558, fax: 54-5704)

| Head:                       | <b>Attila Hunyadi PhD, DS</b> c<br>Full Professor                                            |
|-----------------------------|----------------------------------------------------------------------------------------------|
| Emeritus Professors:        | Mária Báthori PhD, DSc                                                                       |
|                             | Imre Máthé PhD, DSc                                                                          |
|                             | Kálmán Szendrei<br>candidate of chemical sciences                                            |
| Full Professors:            | Judit Hohmann PhD, DSc<br>corresponding member of the HAS                                    |
|                             | Dezső Csupor PhD, DSc                                                                        |
| Associate Professors:       | Zsuzsanna Hajdu PhD                                                                          |
|                             | <b>Andrea Vasas PhD</b> ( <i>Research Consultant</i> )<br>Email: <u>vasas.andrea@szte.hu</u> |
| Assistant Professors:       | Crul-Tóth Noémi PhD                                                                          |
|                             | <b>Dóra Rédei (54-6451)</b> (Educational Advisor)<br>Email: <u>redei.dora.judit@szte.hu</u>  |
|                             | Tivadar Kiss PhD                                                                             |
|                             | Katalin Veres PhD (54-6451) (Educational Advisor)<br>Email: <u>veres.katalin@szte.hu</u>     |
| <b>Research Associates:</b> | Annamária Kincses PhD                                                                        |
|                             | Norbert Kúsz PhD                                                                             |
|                             | Kornél Szőri PhD                                                                             |
|                             | Máté Vágvölgyi PhD                                                                           |
| <b>Research Assistants:</b> | Gábor Girst                                                                                  |
|                             | Tímea Halasi-Gonda (Maternity leave)                                                         |
|                             | Márton Benedek Háznagy                                                                       |
|                             | Agbadua Orinamhe Godwin                                                                      |
| Biologist:                  | Mónika Horzse                                                                                |
| Technicians:                | Konrád Kurunczi-Papp                                                                         |
|                             | Kornél Szemerédi                                                                             |
|                             | Erzsébet Csiszárné Makra                                                                     |
| PhD students:               | Alburqan Marah                                                                               |
|                             | Anita Barta                                                                                  |
|                             | Orsolya Fanni Judák                                                                          |
|                             | Gábor Laczkó                                                                                 |

|                        | Péter Püski                                                                  |
|------------------------|------------------------------------------------------------------------------|
|                        | Dyke Gita Wirasisya                                                          |
|                        | George Anis Al-Qassab                                                        |
|                        | Hiba Zeini                                                                   |
|                        | Madah Manar                                                                  |
|                        | Mohamed Abakar Maaz                                                          |
|                        | Tasneem Sultan Abu Ghazal                                                    |
|                        | Zsanett Janka Tóth                                                           |
| Demonstrators:         | András Juhász (4th year)                                                     |
|                        | András Kele (4th year)                                                       |
|                        | Benedek Szűcs (5th year)                                                     |
| External Instructors:  | <b>Ibolya Fülöpné Csákó</b><br>police lieutenant colonel, pharmacist, lawyer |
|                        | <b>Tamás Csesztregi</b><br>forensic chemist                                  |
|                        | <b>Tamás Horányi</b><br>Honorary Associate Professor                         |
|                        | Ana Sofia Fernandes Martins<br>Honorary Associate Professor                  |
|                        | <b>István Ujváry</b><br>Honorary Associate Professor                         |
| Management consultant: | Beáta Tóth                                                                   |
| Office Assistant:      | Ildikó Nagy                                                                  |

### **INSTITUTE OF PHARMACEUTICAL ANALYSIS**

(6720 Szeged, Somogyi u. 4. Phone: 54-5925)

| Head:                 | <b>István Ilisz PhD, DS</b> c<br>Full Professor                                                                              |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------|
| Emeritus Professors:  | <b>György Dombi PhD</b><br>candidate of chemical sciences                                                                    |
|                       | Antal Péter PhD, DSc                                                                                                         |
| Associate Professors: | Róbert Berkecz PhD                                                                                                           |
|                       | <b>Gerda Szakonyi PhD (54-5806)</b><br>(Educational Advisor and Research Consultant)<br>Email: <u>szakonyi.gerda@szte.hu</u> |
| Research Associate:   | Dániel Tanács PhD                                                                                                            |
| Researcher:           | Tímea Körmöczi PhD                                                                                                           |
| Engineer:             | Melinda Guba                                                                                                                 |
|                       | Gabriella Vasas                                                                                                              |
| PhD students:         | Ali Sahraa                                                                                                                   |
|                       | Emese Zsuzsanna Galgóczi                                                                                                     |
|                       | Gábor Németi                                                                                                                 |
| Management Consultant | : Ildikó Aignerné Kisagócsi                                                                                                  |

### **INSTITUTE OF PHARMACODYNAMICS AND BIOPHARMACY**

(6720 Szeged, Eötvös u. 6. Phone/fax: 54-5567)

| Head:                   | <b>István Zupkó PhD, DS</b> c<br>Full Professor                                               |
|-------------------------|-----------------------------------------------------------------------------------------------|
| Associate Professor:    | <b>Eszter Ducza PhD (34-1971)</b> (Educational Advisor)<br>Email: <u>ducza.eszter@szte.hu</u> |
| Assistant Professors:   | Noémi Bózsity-Faragó PhD                                                                      |
|                         | Renáta Kanizsainé Minorics PhD                                                                |
|                         | Zsuzsanna Schelz PhD                                                                          |
|                         | Adrienn Seres-Bokor PhD (Maternity leave)                                                     |
|                         | Anita Sztojkov-Ivanov PhD                                                                     |
| Assistant Lecturers:    | Kata Kira Kemény                                                                              |
|                         | Adriána Judit Kovács                                                                          |
|                         | Péter Szatmári                                                                                |
| Research assistant:     | Tahaei Ashkan                                                                                 |
| PhD students:           | Aljazmaty Haya                                                                                |
|                         | Kata Kira Kemény                                                                              |
|                         | Péter Szatmári                                                                                |
|                         | Ejlal Abdallah Abdallah                                                                       |
|                         | Hiba Faroug Muddather Abdallah                                                                |
|                         | Isaac Kinyua Njangiru                                                                         |
| Demonstrators:          | Krisztina Réka Paveszka (5th year)                                                            |
|                         | Dorottya Varga (5th year)                                                                     |
| Guest Lecturers:        | <b>Anna Borsodi PhD, DSc</b><br>Private Professor                                             |
|                         | <b>Gábor Zacher MD</b><br>Toxicologist                                                        |
| Management Consultant   | : Veronika Verseghy                                                                           |
| Laboratory Technicians: | Erzsébet Goda                                                                                 |
|                         | Károly Nagy                                                                                   |
| Assistant Technician:   | Helga Horváth                                                                                 |
| Animal Handler:         | Dániel Székesi                                                                                |

### **INSTITUTE OF PHARMACEUTICAL CHEMISTRY**

(6720 Szeged, Eötvös u. 6. Phone: 54-5562, fax: 54-5563)

| Head:                  | <b>István Szatmári PhD, DS</b> c<br>Full Professor                                                     |
|------------------------|--------------------------------------------------------------------------------------------------------|
| Full Professors:       | Enikő Forró PhD, DSc                                                                                   |
|                        | Zsolt Szakonyi PhD ,DSc                                                                                |
| Associate Professors:  | László Lázár PhD (Research Consultant)                                                                 |
|                        | <b>Márta Palkó PhD (54-5564)</b> (Educational Advisor)<br>E-mail: <u>palko.marta@szte.hu</u>           |
| Assistant Professors:  | <b>Zita Lázárné Zalán PhD</b> (Deputy Educational Advisor)<br>Email: <u>lazarne.zalan.zita@szte.hu</u> |
|                        | Bálint Lőrinczi PhD                                                                                    |
|                        | Attila Márió Remete PhD                                                                                |
| Assistant Lecturers:   | Orsy György                                                                                            |
|                        | Rebeka Ildikó Szabados-Mészáros                                                                        |
| HAS Stereochemical Res | earch Group:                                                                                           |
| Research fellow:       | Le Minh Tam PhD                                                                                        |
| Research assistant:    | Sayeh Shahmohammadi                                                                                    |
| Scientific advisor:    | György Szőllősi PhD, DSc                                                                               |
| Group leader:          | István Szatmári PhD, DSc                                                                               |
| Administrator:         | Mónika Varga                                                                                           |
| Engineers:             | Judit Árva                                                                                             |
|                        | Nóra Korom-Tóth                                                                                        |
|                        | Szilvia Nagy                                                                                           |
|                        | Imre Ugrai                                                                                             |
| Chemical Technicians:  | József Arnold                                                                                          |
|                        | Tímea Ácsné Széll                                                                                      |
|                        | Anikó Farkas                                                                                           |
|                        | Sándorné Miklós-Nagy                                                                                   |
|                        | Gergő Papp                                                                                             |
|                        | Balázs Sovány                                                                                          |
|                        | Mihály Vajda                                                                                           |
| PhD students:          | Alsoliman Hiba                                                                                         |
|                        | Dorottya Bai                                                                                           |
|                        | Dima Depp                                                                                              |
|                        | Dóra Hegedűs                                                                                           |
|                        |                                                                                                        |

|                        | Tünde Faragó                                                                            |
|------------------------|-----------------------------------------------------------------------------------------|
|                        | Ghassan Hussain Elagib                                                                  |
|                        | Lili Kóczán                                                                             |
|                        | Meruyert Ashimbayeva                                                                    |
|                        | Momen Fareed                                                                            |
|                        | Musab Mohamed Ibrahim Ali                                                               |
|                        | Vencel László Petrovicz                                                                 |
|                        | Reem Moustafa                                                                           |
|                        | Julián Robin Sárik                                                                      |
|                        | Sawssen Bouali                                                                          |
|                        | Péter Simon                                                                             |
|                        | Levente Törteli                                                                         |
|                        | Zein Alabdeen Khdar                                                                     |
| Demonstrators:         | <b>Dorka Gubó</b> (4th year)                                                            |
|                        | Csaba Mester (4th year)                                                                 |
| Guest Lecturer:        | <b>Pál Szabó PhD</b><br>Honorary Associate Professor<br>Chemical Research Center of HAS |
| Secretary:             | Mónika Varga                                                                            |
| Assistant Technicians: | Ágnes Kucsora                                                                           |
|                        | Éva Temesváriné Szöri                                                                   |
|                        |                                                                                         |

### INSTITUTE OF PHARMACEUTICAL TECHNOLOGY AND REGULATORY AFFAIRS

(6720 Szeged, Eötvös u. 6. Phone/fax: 54-5571, 54-6116)

| Head:                 | <b>Ігдіко́ Сзо́ка РнD</b><br>Full Professor                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Emeritus Professors:  | Piroska Szabóné Révész PhD, DSc                                                                                               |
|                       | Klára Pintyéné Hódi PhD, DSc                                                                                                  |
|                       | Mihály Kata PhD, DSc                                                                                                          |
| Associate Professors: | Rita Ambrus PhD (PhD Advisor)                                                                                                 |
|                       | <b>Szilvia Berkó PhD (54-5573)</b><br>(Educational Advisor for Pharmacist Specialists)<br>Email: <u>berko.szilvia@szte.hu</u> |
|                       | Mária Budai-Szűcs PhD                                                                                                         |
|                       | Anita Kovács PhD                                                                                                              |
|                       | Jr. Géza Regdon PhD                                                                                                           |
|                       | <b>Tamás Sovány PhD</b> (Research Consultant)<br>Email: <u>sovany.tamas@szte.hu</u>                                           |
| Assistant Professors: | Csilla Balla-Bartos PhD                                                                                                       |
|                       | Dorina Dobó PhD                                                                                                               |
|                       | <b>Orsolya Jójártné Laczkovich PhD</b> (Educational Advisor)<br>Email: jojartne.laczkovich.orsolya@szte.hu                    |
|                       | <b>Gábor Katona PhD</b><br>(Educational Advisor for English Students)<br>Email: <u>katona.gabor@szte.hu</u>                   |
|                       | Katalin Kristó PhD                                                                                                            |
| Assistant Lecturers:  | Krisztina Ludasi PhD                                                                                                          |
|                       | Krisztián Pamlényi PhD                                                                                                        |
|                       | Bence Sipos PhD                                                                                                               |
|                       | Luca Éva Uhljar PhD                                                                                                           |
| PhD Students:         | Alaa Gamiel                                                                                                                   |
|                       | Alharith Abdulraheem Abdulmajeed Hassan<br>(AlharithHassan)                                                                   |
|                       | Flórián Benkő                                                                                                                 |
|                       | Martin Cseh                                                                                                                   |
|                       | Fanni Falusi                                                                                                                  |
|                       | Boglárka Szalai<br>Patricia Oraclus Varga                                                                                     |
|                       | Patricia Orsolya Varga                                                                                                        |

|                       | Fatima Adnan Rajab<br>Hala Rayya                                                                                            |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                       | Hanan Adnan Mohammad                                                                                                        |
|                       | Hasanpour Feria                                                                                                             |
|                       | Heba Fayez Banat                                                                                                            |
|                       | Tamás Horváth                                                                                                               |
|                       | Ifeoma Cynthia Ekenna                                                                                                       |
|                       | Lomass Ali Soliman                                                                                                          |
|                       | Mahmoud Azza Asim Khalid                                                                                                    |
|                       | Petra Party                                                                                                                 |
|                       | Rabia Ashfaq                                                                                                                |
|                       | Ranim Saker                                                                                                                 |
|                       | Rasha Almasri                                                                                                               |
|                       | S P Yamini Kanti                                                                                                            |
|                       | Sandra Aulia Mardikasari                                                                                                    |
|                       | Shammout Hadi Mohamad Marwan                                                                                                |
|                       | Yusra Bakri Farah                                                                                                           |
| Demonstrators:        | <b>Márk Benei</b> (5th year)                                                                                                |
|                       | Noémi Szabó (5th year)                                                                                                      |
| External Instructors: | <b>Erzsébet Csányi PhD</b><br>Honorary Professor                                                                            |
|                       | <b>István Barcsay</b><br>Honorary Associate Professor<br>Phoenix Pharma, Budapest                                           |
|                       | <b>Margit Anna Gombos</b><br>Honorary Associate Professor<br>candidate of agricultural sciences<br>Phoenix Pharma, Budapest |
|                       | <b>Magdolna Hasznosné Nezdei</b><br>Honorary Associate Professor<br>candidate of chemical science, Veszprém                 |
|                       | <b>Katharina Matzkó-Hollenbach</b><br>Honorary Associate Professor, scientific advisor                                      |
|                       | <b>Endre Mikulásik</b><br>Honorary Associate Professor<br>product assessor, lead auditor (CE Certiso Kft.)                  |
|                       | <b>Mária Miseta</b><br>Honorary Associate Professor<br>candidate of pharmaceutical sciences, Szeged                         |

#### **Gabriella Ujhelyi** Honorary Associate Professor

**Magdolna Vágó** Honorary Associate Professor Pernix Pharma Gyógyszergyártó Kft., Zalaegerszeg

### Management Consultants: Evelyn Weszelovszkyné Dér

#### Ágnes Balázs

Specialised support personnels:

Erika Feczkóné Boda Gabriella Molnár Krisztina Tóth Andrea Szalai Ildikó Vígh

| Research Assistant:   | Anett Németh  |
|-----------------------|---------------|
| Research Coordinator: | Mahwash Muk   |
| Chemical Technician:  | Klára Kovács  |
| Engineer:             | Balázs Béniám |

Assistant Technicians:

Mahwash Mukhtar Klára Kovács Balázs Béniám Lászlóné Molnár Éva Oláh Valéria Varga

### **INSTITUTE OF CLINICAL PHARMACY**

(6725 Szeged, Szikra u. 8. Phone/fax: 54-4921)

| Head:                        | <b>Dezső Csupor PнD, DS</b> c<br>Full Professor                                                                       |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Emeritus Professor:          | Gyöngyvér Soós PhD                                                                                                    |
| Associate Professors:        | Péter Doró PhD                                                                                                        |
|                              | Ria Benkő PhD                                                                                                         |
|                              | <b>Mária Matuz PhD(34-2572)</b><br>(Educational Advisor and Research Consultant)<br>Email: <u>matuz.maria@szte.hu</u> |
| Associate Professor:         | Barbara Éva Tóth PhD                                                                                                  |
| Assistant Lecturer:          | Zsófia Bajtelné Engi                                                                                                  |
| <b>Research Coordinator:</b> | Réka Tóthné Viola                                                                                                     |
| Pharmacist:                  | Márta Csatordai                                                                                                       |
| PhD Students:                | Zsófia Bajtelné Engi                                                                                                  |
|                              | Helga Hambalek                                                                                                        |
|                              | Roxána Ruzsa                                                                                                          |
|                              | András Érszegi                                                                                                        |
|                              | Ikhwan Yuda Kusuma                                                                                                    |
|                              | Róbert Nacsa                                                                                                          |
|                              | Ni Made Amelia Ratnata Dewi                                                                                           |
|                              | Omer Ahmed Altayeb Ali                                                                                                |
|                              | Erika Papfalvi                                                                                                        |
| Secretary:                   | Nóra Molnár                                                                                                           |
|                              | <b>Fruzsina Karai</b> (long-term break)                                                                               |
|                              |                                                                                                                       |

### **OFFICE OF VOCATIONAL EDUCATION AND FURTHER EDUCATION**

(6720 Szeged, Eötvös u. 6. Phone/fax: 54-4917, Email: <u>szakkepzes.pharm@szte.hu</u>)

| Head of the Office | Erzsébet Háznagyné Radnai PhD (54-6454)   |
|--------------------|-------------------------------------------|
|                    | specialist pharmacist, research associate |
| Secretary:         | Róbertné Gyémánt                          |

### **CO-FACULTY INSTITUTES AND DEPARTMENTS INVOLVED IN EDUCATION**

### Albert Szent-Györgyi Medical School

### **DEPARTMENT OF ANATOMY**

(Szeged, Kossuth L. sgt. 38. Phone: 54-5665, fax: 54-5707)

| Head:               | <b>Antal Nógrádi PhD, DSc</b><br>Full Professor                               |
|---------------------|-------------------------------------------------------------------------------|
| Course Supervisor   | <b>Zoltán Süle PhD</b><br>Assistant Professor                                 |
| Educational Advisor | <b>Zoltán Süle PhD (54-5734)</b><br>Email: <u>sule.zoltan@med.u-szeged.hu</u> |

### DEPARTMENT OF BIOCHEMISTRY

(Szeged, Dóm tér 9. Phone: 54-5096, fax: 54-5097)

| Head:                | Тама́s Csont PhD<br>Associate Professor                                                                |
|----------------------|--------------------------------------------------------------------------------------------------------|
| Course Supervisor    | Tamás Csont PhD                                                                                        |
| Educational Advisor: | <b>Csaba Csonka PhD (54-5755)</b><br>Associate Professor<br>Email: <u>csonka.csaba@med.u-szeged.hu</u> |

### **DEPARTMENT OF PHYSIOLOGY**

(Szeged, Dóm tér 10. Phone: 54-5101, fax: 54-5842)

| Head:                | <b>Gyula Sári PhD DSc</b><br>Full Professor                                             |
|----------------------|-----------------------------------------------------------------------------------------|
| Course Supervisor:   | <b>Gabriella Kékesi PhD</b><br>Associate Professor                                      |
| Educational Advisor: | <b>Gabriella Kékesi PhD (54-4971)</b><br>Email: <u>kekesi.gabriella@med.u-szeged.hu</u> |

### **DEPARTMENT OF PATHOPHYSIOLOGY**

(Szeged, Szőkefalvi-Nagy Béla u. 6. (Health Sciences Training Block), Phone/fax: 54-5994)

| Head:                | <b>Zoltán Rakonczay PhD, DS</b> c<br>Full Professor                                                       |
|----------------------|-----------------------------------------------------------------------------------------------------------|
| Course Supervisor:   | Zoltán Rakonczay PhD, DSc                                                                                 |
| Educational Advisor: | Katalin Eszter Ibos (54-5111)<br>Assistant Lecturer<br>E-mail: <u>ibos.katalin.eszter@med.u-szeged.hu</u> |

#### **DEPARTMENT OF PUBLIC HEALTH**

(Szeged, Dóm tér 10. Phone: 54-5119, fax: 54-5120)

| Head:                | Edit Paulik Ph <b>D</b><br><mark>professor</mark>                                                               |
|----------------------|-----------------------------------------------------------------------------------------------------------------|
| Course Supervisor:   | Edit Paulik PhD                                                                                                 |
| Educational Advisor: | <b>Dr. Zsuzsanna Máté PhD (34-2866)</b><br>Assistant Professor<br>E-mail: <u>mate.zsuzsanna@med.u-szeged.hu</u> |

**DEPARTMENT OF NUCLEAR MEDICINE** (Szeged, Korányi fasor 6. Phone: 54-5390, 54-5772, Fax: 54-4564)

| Head:                | <b>László Pávics РнD DSc</b><br>Full Professor                                                                  |
|----------------------|-----------------------------------------------------------------------------------------------------------------|
| Educational Advisor: | <b>Tünde Krisztina Polanek (54-5375)</b><br>Physicist<br>E-mail: <u>polanek.tunde.krisztina@med.u-szeged.hu</u> |

#### **DEPARTMENT OF MEDICAL PHYSICS AND INFORMATICS**

(Szeged, Korányi fasor 9. Phone/fax: 54-5077)

| Head:                | <b>Ferenc Peták PhD, DSc</b><br>Full Professor                              |
|----------------------|-----------------------------------------------------------------------------|
| Course Supervisors:  | <b>Ferenc Rárosi PhD</b><br>Assistant Professor                             |
|                      | <b>József Tolnai PhD</b><br>Assistant Professor                             |
| Educational Advisor: | <b>József Tolnai PhD (54-5080)</b><br>E-mail: <u>jozsef@med.u-szeged.hu</u> |

### DEPARTMENT OF MEDICAL GENETICS

(Szeged, Somogyi u. 4. Phone: 54-5134, 54-5133)

| Head:                | <b>Márta Széll PhD, DSc</b><br>Full Professor                                                                               |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Course Supervisor:   | Márta Széll PhD, DSc                                                                                                        |
| Educational Advisor: | <b>Zsuzsanna László PhD</b> (Educational Advisor)<br>Associate Professor<br>E-mail: <u>laszlo.zsuzsanna@med.u-szeged.hu</u> |

#### **DEPARTMENT OF MICROBIOLOGY EDUCATION AND RESEARCH CENTER** (Szeged, Dóm tér 10. Phone: 54-5115, fax: 54-5113)

| Head and:            | <b>Katalin Burián PhD, DSc</b><br>Full Professor                                                                        |
|----------------------|-------------------------------------------------------------------------------------------------------------------------|
| Course Supervisor:   | Katalin Burián PhD, DSc                                                                                                 |
| Educational Advisor: | <b>Anita Varga-Bogdanov PhD (54-6112)</b><br>Assistant Professor<br>E-mail: <u>varga-bogdanov.anita@med.u-szeged.hu</u> |

### Albert Szent-Györgyi Medical School Faculty of Science and Informatics

#### **DEPARTMENT OF IMMUNOLOGY**

(Szeged, Szőkefalvi-Nagy Béla u. 6. 6., 2nd floor, Phone: 34-2826)

| Head:                | <b>Krisztina Körmöndiné Buzás PhD</b><br>Associate Professor                                                               |
|----------------------|----------------------------------------------------------------------------------------------------------------------------|
| Educational Advisor: | <b>Ágnes Czibula PhD</b> (Hungarian pharmacy program)<br>Assistant Professor<br>Email: <u>czibula.agnes@brc.hu</u>         |
|                      | <b>Roberta Fajka-Boja PhD</b> (English pharmacy program)<br>Assistant Professor<br>Email: <u>fajka boja.roberta@brc.hu</u> |

### **Faculty of Science and Informatics**

#### **BOLYAI INSTITUTE, DEPARTMENT OF ANALYSIS**

(Szeged, Aradi vértanúk tere 1., Phone: 54-4698, fax: 54-4548)

| Head:               | <b>Lajos Molnár PhD DSc</b><br>Full Professor                                                    |
|---------------------|--------------------------------------------------------------------------------------------------|
| Course Supervisor:  | <b>Vanda Fülöp PhD (54-4083)</b><br>Associate Professor<br>Email: <u>fulopv@math.u-szeged.hu</u> |
| Educational Advisor | <b>Gábor Szűcs PhD (54-4080)</b><br>Assistant Professor<br>Email: <u>szucsg@math.u-szeged.hu</u> |

**DEPARTMENT OF PHYSICAL CHEMISTRY AND MATERIALS SCIENCE** (Szeged, Rerrich B. tér 1., Phone: 54-4209, fax: 54-4042)

| Head:                | <b>Ágota Tóth PhD DSc</b><br>Full Professor                                                                      |
|----------------------|------------------------------------------------------------------------------------------------------------------|
| Course Supervisors:  | <b>Dezső Horváth PhD DSc</b><br>Full Professor                                                                   |
|                      | <b>Edit Juhászné Csapó PhD</b><br>Assistant Professor                                                            |
|                      | <b>Tamás Szabó PhD</b><br>Assistant Professor                                                                    |
| Educational Advisor: | <b>Katalin Siposné Musza PhD (54-4115)</b><br>Research Associate<br>Email: <u>musza.katalin@chem.u-szeged.hu</u> |

**DEPARTMENT OF EXPERIMENTAL PHYSICS** 

(Szeged, Dóm tér 9., Phone: 54-4052)

| Head:                | PÉTER SZÉKELY PHD<br>Associate Professor                                                             |
|----------------------|------------------------------------------------------------------------------------------------------|
| Course Supervisor:   | <b>Gábor Laczkó PhD</b><br>Honorary Associate Professor                                              |
| Educational Advisor: | <b>Ditta Novák (54-4052)</b><br>Education Coordinator<br>Email: <u>novak.ditta@physx.u-szeged.hu</u> |

### DEPARTMENT OF INORGANIC AND ANALYTICAL CHEMISTRY

(Szeged, Dóm tér 7., Phone/fax: 54-4340, E-mail: szakt@chem.u-szeged.hu)

| Head:                | <b>Éva Anna Enyedy PhD, DS</b> c<br>Associate Professor                                               |
|----------------------|-------------------------------------------------------------------------------------------------------|
| Course Supervisor:   | Éva Anna Enyedy PhD, DSc                                                                              |
| Educational Advisor: | <b>Béla Gyurcsik PhD (54-4335)</b><br>Associate Professor<br>E-mail: <u>gyurcsik@chem.u-szeged.hu</u> |

### HUNGARIAN NATIONAL AMBULANCE SERVICE REGIONAL ORGANISATION OF SOUTH GREAT PLAIN

(Szeged, Kossuth L. sgt. 29. Phone: 55-1611)

| Head:                | <b>ATTILA ZENTAY MD</b><br>regional manager<br>HNAS GSP Organization                                   |
|----------------------|--------------------------------------------------------------------------------------------------------|
| Educational Advisor: | <b>Tibor Batka (55-1611)</b><br>regional education coordinator<br>E-mail: <u>batka.tibor@mentok.hu</u> |
| Study administrator: | <b>Beáta Maróti (55-1611)</b><br>administrator<br>Email: <u>maroti.beata@mentok.hu</u>                 |

### **FOREIGN LANGUAGE CENTER**

(Szeged, Honvéd tér 6. Phone, fax: 54-4539)

Head:

JUDIT LÉVAI (54-4141) E-mail: <u>levai@lingo.u-szeged.hu</u>

**Educational Deputy Head:** 

Ágnes Tünde Tanács (54-4638) tanacs.agnes@lingo.u-szeged.hu

General Deputy Manager: **Péter Simon (34-3439)** E-mail: <u>simonp@lingo.u-szeged.hu</u>

### **MENTORS**

Students can request the help of the following instructors in academic matters:

| I.   | year: | Tivadar Kiss PhD                                              |
|------|-------|---------------------------------------------------------------|
|      |       | Institute of Pharmacognosy                                    |
|      |       | Email: <u>kiss.tivadar@szte.hu</u>                            |
| II.  | year: | Bálint Lőrinczi PhD                                           |
|      |       | Institute of Pharmaceutical Chemistry                         |
|      |       | Email: <u>lorinczi.balint@szte.hu</u>                         |
| III. | year: | Krisztina Ludasi PhD                                          |
|      | 2     | Institute of Pharmaceutical Technology and Regulatory Affairs |
|      |       | Email: <u>ludasi.krisztina@szte.hu</u>                        |
| IV.  | year: | Mária Matuz PhD                                               |
|      | U     | Institute of Clinical Pharmacy                                |
|      |       | Email: <u>matuz.maria@szte.hu</u>                             |
| V.   | year: | Zsuzsanna Schelz PhD                                          |
|      |       | Institute of Pharmacodynamics and Biopharmacy                 |

Email: <u>schelz.zsuzsanna@szte.hu</u>

### INFORMATION OF STUDENT UNION OF FACULTY OF PHARMACY (HÖK)

### Members of the Board:

Head: **PANNA ILDIKÓ PRIBELSZKI** Email: <u>pribelszkipanna16@gmail.com</u>

General Deputy Head: CSONGOR GYULA SZILÁGYI Email: <u>csonesz00@gmail.com</u>

Deputy Head of Economy: **FLÓRA SENDULA** *Email: sendulaflora@gmail.com* 

Head of the Office **ANDOR GÁBOR HORPÁCSI** *Email: andor19980706@gmail.com* 

Culture referent: **ANDRÁS JUHÁSZ** *Email: gepandras@gmail.com* 

### The tasks of the Board:

The most important task of the Student Union is to represent the student's interests, participate in decisions about important matters that also affect students, and evaluate applications. In addition, the main tasks of the Student Union include solving the problems that arise, communicating with the management of the Faculty, and providing adequate information about student benefits and faculty events.

Furthermore, in cooperation with the event organising committee of the Faculties of General Medicine and Dentistry, the organisation of sports and cultural programs, such as Freshmen's Start Day, Freshmen's Ball, Freshmen's Kettle, "Icy" evenings or Anna spa evenings. The HÖK also organises programs at the Faculty, such as the Pharmacy Dance Party, popular among the lecturers, and the National Meeting of Pharmacists.

### Where can you find us?

In our office at Semmelweis street 4, in the basement of the College, from Monday to Wednesday from 10 a.m. to 3 p.m. and on Thursday from 1 p.m. to 2 p.m. Additionally, on our Facebook and Instagram pages as SZTE GYTK HÖK and sztegytkhok.

Feel free to contact us if you have any questions!

### GENERAL INFORMATION REGARDING THE CREDIT SYSTEM

### **GENERAL TERMS**

**Credit**: a unit for measuring a student's academic work of a course or curriculum unit which expresses in respect to the estimated time necessary for acquiring the defined learning outcomes and meeting the requirements; one credit represents thirty academic hours on average, and the value of credit does not depend on the assessment of the learning outcome acquired by the student, provided that the student's performance was accepted.

**Criterion requirement:** a condition enclosed to the commencement of a period of study, the registration for a subject, the taking of a final examination, or the awarding of a diploma, which is of significance or prevents excessive delays in studies. (Completion of, e.g., two semesters of physical education is required to obtain the diploma.)

**Criterion subject:** a criterion-required subject or another study requirement to which no credit is assigned. Such subjects can be professional practice and are considered as subjects.

**Subject programme:** a description of the knowledge to be acquired in a subject and the general conditions for its achievement, including at least:

- -the name of the subject,
- -the name of the department responsible for teaching the subject,
- -the number of credits to be gained by completing the subject,
- -obligatory and required units of the subject,
- -the form of teaching of the subject (units),
- -the number of teaching hours per week (semester),
- -credits for the subject,
- -the conditions for obtaining the credit and the form(s) of the examination(s) (colloquium, term mark, report, basic level examination, comprehensive examination),
- -type of assessment (five-degree, three-degree, two-degree),
- -the prerequisites for taking up or completing the subject,
- -the task and purpose of teaching the subject,
- -thematic description of the curriculum,
- -the definition of learning outcomes in terms of knowledge, skills, attitudes and autonomy- responsibilities,
- -indication of the written curriculum.

**Recommended curriculum:** the curriculum offered to the student to enable him/her to obtain the qualification within the prescribed period of study.

**Nftv. Section 49** (4)The institution of higher education shall issue a recommended curriculum for the compilation of the student study programme. The institution of higher education shall ensure that all students have the opportunity to give an account of their knowledge and to repeat an examination, whether successful or unsuccessful, in such a way that the impartial conduct and assessment of the repeated examination is guaranteed.

**Course registration:** registration for the announced lecture and/or classroom and/or laboratory classes (courses) of a subject or for its exam. The condition is to fulfil the prerequisites of the subject.

**Subject preconditions:** the range of subjects or other obligations whose completion is the precondition of taking another subject or fulfilling another educational obligation.

### **Active semester:** the semester for which the student is validly registered in accordance with the Academic Rules and Regulations of the University of Szeged.

**Vhr. 51.** § 45. § With the exception of the provisions of Section 45 (2) of the Nftv, students may withdraw their registration pursuant to Point (5) of Section 42 of the Nftv within one month of the beginning of the semester, but no later than 14<sup>th</sup> of October or 14th of March, or may request a suspension of their studies until the same dates after enrolment. If, after enrolment or registration, the student does not request the suspension of his/her studies or does not terminate his/her legal status by these specified dates, the semester in question shall be considered an active semester and shall give rise to obligations arising from the acceptance of the conditions of the training supported by the Hungarian State scholarship (full or part) or the obligations contained in the training contract, regardless of the fulfilment of his/her study obligations. If the student suspends his/her studies or does not enrol and this does not result in the termination of the student's status, the semester in question shall be registered as a passive semester.

#### **Passive semester:** a semester in which the student status is interrupted.

**Vhr. 51.** § With the exception of the provisions of Section 45 (2) of the Nftv, students may withdraw their registration pursuant to Point (5) of Section 42 of the Nftv within one month of the beginning of the semester, but no later than 14<sup>th</sup> of October or 14<sup>th</sup> of March, or may request a suspension of their studies until the same dates. If, after enrolment or registration, the student does not request the suspension of his/her studies or does not terminate his/her legal status by these specified dates, the semester in question shall be considered an active semester and shall give rise to obligations arising from the acceptance of the conditions of the training supported by the Hungarian State scholarship (full or part) or the obligations contained in the training contract, regardless of the fulfilment of his/her study obligations. If the student suspends his/her studies or does not enrol and this does not result in the termination of the student's status, the semester in question shall be registered as a passive semester.

**Cross-education:** the student acquires the knowledge and skills required in the curriculum by completing a course taught to students by another Faculty or institution of the University.

**Parallel programme:** the student is parallelly participating in an educational programme at the university and in another programme at a university or other higher education institution.

### CONDITIONS FOR OBTAINING THE DIPLOMA OF DOCTOR OF PHARMACY

- collecting 300 credit points and fulfilling the criterion conditions as prescribed in the curriculum,
- preparing and successfully defending a thesis,
- successful completion of the Board Exam.

### THE MOST CRITICAL ASPECTS OF CREDIT COLLECTION

## To obtain the diploma, the student must collect 300 credit points and fulfil the criterion requirements assigned to the training.

It is highly suggested to follow the recommended curriculum, as it ensures an average pace of progress and means the possibility of obtaining the diploma in 10 semesters. The recommended curriculum follows the schedule of traditional, non-credit-based training, in which the completion of one semester in the curriculum is equivalent to an average of 30 credits ( $\pm$ 3, 27–33 credits). The credit-based training allows deviating from what is recommended in the curriculum by keeping the courses built on each other.

Within the total number of credits to be acquired (300), the subjects are different:

### **COMPULSORY SUBJECTS**

The student must complete all compulsory subjects during his/her studies—**the total credit point value** of the compulsory subjects is **274**.

### **COMPULSORY ELECTIVE SUBJECTS**

They will be chosen from the subjects the Faculty announces with a given credit point value. The credit point value of compulsory elective subjects within the total number of credits is a minimum of **10**.

It is recommended to take compulsory electives in the 9th semester. The subjects included here require specific prior studies and fundamental knowledge, so students in the lower years cannot usually enrol for them. Suppose lower-year students can still enrol for a compulsory elective subject. In that case, fifth-year students have an advantage when enrolling for the subject.

### **ELECTIVE SUBJECTS**

Among the subjects announced by the Faculty of Pharmacy, a maximum of 5% of the 300 credits required to obtain the diploma can be freely chosen, i.e. **15 credits** (due to the value of elective subjects usually having an even number of credits, this in practice means collecting **16 credits**.

Elective, professionally non-related subjects (subject X) can be taken up to 2% (**6 credits**). Students can also choose subjects announced as "compulsory elective" subjects as "elective" subjects.

Students can also take optional subjects at other faculties and departments of the institution, and the Faculty Credit Transfer Committee decides on their acceptance and the assessment of their credit point value. In addition to the credit points required to obtain the diploma, the student can collect +30 credit points without the obligation to reimburse costs.

### LANGUAGE TRAINING

Students, to comply with these requirements, can participate in two types of language training:

The "**English language**" courses are recommended for students. The subject provides medical/pharmaceutical language skills in English for two semesters.

The **"Latin language"** is a compulsory course for pharmacy students at the Faculty of Pharmacy, and enrollment is recommended in the 1st semester. At the end of the weekly 2-hour course, the student's performance is evaluated by practical grade. The credit point value of the subject is 2.

A **Stipendium Hungaricum Scholarship holder** in full-time foreign language bachelor's and master's courses (includingalso one-tier master's degree) is required to attend the **Hungarian as a foreign language and culture course** (hereinafter referred to as the Hungarian abbreviation: MID) provided by the host institution in the first year of their studies in the SH Programme.

### **PHYSICAL EDUCATION**

Physical education is a criterion requirement for awarding the diploma. The students must **participate** in the 2-hour physical education courses for two semesters.

The Institute of Physical Education and Sports Science can grant an exemption for certified sports activities. No credit points are assigned to physical education; it concludes with a signature. The Study Committee of the University of Szeged, or according to the decision of its Senate in August 2023, the physical education subjects will be reclassified to an optional subject recognised with 2 credits in the case of the previously completed subject. The credits were assigned by subsequent crediting. Since the IT implementation of reclassifying physical education courses into a credit subject is time-consuming, it is still possible to register for non-credit physical education courses this semester. The credits will be recognised with subsequent crediting.

### EXTERNAL INTERNSHIPS OF PHARMACY STUDENTS

Pharmacy students participate in a summer internship after their 2nd, and 3rd year and in professional internships in the final year as follows:

### **PROFESSIONAL INTERNSHIPS:**

Course Supervisor:

**Mária Budai-Szűcs PhD (54-5573)** Email: <u>budai-szucs.maria@szte.hu</u>

### Professional internship 1 (GYTK22A-901): For 2nd-year students

The practice period is 4 weeks (40 hours/week).

Precondition: History of Pharmacy and Pharmaceutical Propedeutics (GYTK22A-401).

**Professional internship 2 (GYTKKAM512)**: For 3rd-year students (The course registration is at the 1st semester of the 4th academic year)

The practice period is 4 weeks (40 hours/week).

Precondition: Pharmaceutical Technology 1 lecture (GYTKKAM221).

The student can spend the summer internships at a training place accredited by the SZTE Faculty of Pharmacy or accredited according to the conditions set by the Regulation of Vocational Education.

Summer internships can be completed in a public pharmacy, hospital/clinical pharmacy or pharmaceutical industry.

The purpose of the **public pharmacy internship** is to apply the knowledge the students have acquired during their university education in practice and gain insight into a pharmacy's professional work.

The **hospital/clinical pharmacy internship** aims to provide knowledge of the medication system of inpatient care and gain insight into pharmacists' professional work in hospitals/clinics.

The **pharmaceutical industry internship** aims to help develop the industrial pharmacist's approach and gain specific knowledge about the pharmaceutical factory's organisational structure and the production and control of pharmaceuticals.

### **PHARMACY INTERNSHIPS**

Course Supervisor: Szilvia Berkó PhD

Email: berko.szilvia@szte.hu

**Pharmacy Internship 1 (GYTKKAM521K)**: For 4th-year students (The course registration is at the 1st semester of the 5th academic year.)

The practice period is 9 weeks (40 hours/week) after the repeat examination period. The "Professional Internship 1" course is part of the 9th semester of the curriculum, and the precondition is completing all compulsory subjects by the end of the 8th semester. Professional Internship 1 must be completed in a public pharmacy.

### Pharmacy Internship 2. (GYTKKAM522): For 5th year students.

The period of the practice: 4 calendar months (40 hours/week), February 1 to May 31

Precondition: completion of all compulsory subjects included in the curriculum by the end of the 9th semester.

The "Professional Internship 2" course is part of the 10th semester of the curriculum. The precondition is the completion of all compulsory subjects included by the end of the 9th semester of the curriculum, as well as the collection of required credit points for compulsory elective and elective subjects by the end of the 9th semester.

Out of the 4 months, the student must spend 3 months in a public pharmacy and 1 month in a hospital or clinical pharmacy.

The student can spend the professional internships at a training place accredited by the SZTE Faculty of Pharmacy or accredited according to the conditions set by the Regulation of Vocational Education. In order to gain as much experience as possible, a professional internship in several public pharmacies is recommended. Hospital/clinical pharmacy internships can be completed at a single training location.

The professional internships aim to apply and develop the theoretical knowledge acquired at the university, with particular attention to pharmacodynamics, pharmaceutical technology, and pharmacy administration and management issues and to expand knowledge in the field of professionally correct application related to phytotherapeutic preparations sold in pharmacies. The candidate should gain experience with patients or in the correct communication to be established with the pharmacy's employees. Another goal of the internship is to deepen knowledge in the field of prescription pharmacy.

The hospital/clinical pharmacy internship aims to get an idea of the responsibilities of institutional pharmacies, to learn about the professional and management tasks of hospital/clinical pharmacies, the specific tasks of preparing medicines in the pharmacy, the pharmacy's information work and therapy support activities, as well as the quality assurance system of the pharmacy.

### CURRENT CURRICULUM OF THE PHARMACY TRAINING IN THE ACADEMIC YEAR 2023/2024

#### A new curriculum (OSZKGYO\_N\_EN\_2022) has been introduced starting from the academic year 2022/2023. The current recommended curriculum for students starting their studies in or after September 2022 is shown in the table below:

| Subject            | Subject name                                    | Hours/week |       | Credit | Form of evaluation | Institute responsible for teaching the subject                                                                                    | Precondition                    |  |  |
|--------------------|-------------------------------------------------|------------|-------|--------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--|--|
| code               |                                                 |            | Pract |        |                    |                                                                                                                                   |                                 |  |  |
| Year I, Semester I |                                                 |            |       |        |                    |                                                                                                                                   |                                 |  |  |
| GYTK22A-<br>001    | Latin language (pract)                          |            | 2     | 2      | term mark          |                                                                                                                                   | -                               |  |  |
| GYTK22A-<br>101    | Anatomy 1 (lect)                                | 2          |       | 2      | exam               | Albert Szent-Györgyi Medical School,<br>Department of Anatomy                                                                     | -                               |  |  |
| GYTK22A-<br>102    | Physiology 1 (lect)                             | 4          |       | 4      | exam               | Albert Szent-Györgyi Medical School,<br>Department of Physiology                                                                  | Physiology 1 (pract) (ER)       |  |  |
| GYTK22A-<br>103    | Physiology 1 (pract)                            |            | 2     | 2      | term mark          | Albert Szent-Györgyi Medical School,<br>Department of Physiology                                                                  | -                               |  |  |
| GYTK22A-<br>104    | Pharmaceutical Cell Biology and Genetics (lect) | 3          |       | 3      | exam               | Albert Szent-Györgyi Medical School,<br>Department of Medical Genetics                                                            | -                               |  |  |
| GYTK22A-<br>105    | Informatics (pract)                             |            | 2     | 2      | term mark          | Albert Szent-Györgyi Medical School,<br>Faculty of Science and Informatics,<br>Department of Medical Physics and In-<br>formatics | -                               |  |  |
| GYTK22A-<br>201    | General Chemistry (lect)                        | 2          |       | 3      | exam               | Faculty of Science and Informatics,<br>Department of Physical Chemistry and<br>Materials Science                                  | General Chemistry (pract.) (ER) |  |  |
| GYTK22A-<br>202    | General Chemistry (pract)                       |            | 4     | 3      | term mark          | Faculty of Science and Informatics,<br>Department of Physical Chemistry and<br>Materials Science                                  | -                               |  |  |
| GYTK22A-<br>203    | Mathematics (lect)                              | 2          |       | 3      | exam               | Faculty of Science and Informatics,<br>Bolyai Institute                                                                           | Mathematics (pract.) (ER)       |  |  |
| GYTK22A-<br>204    | Mathematics (pract)                             |            | 2     | 2      | term mark          | Faculty of Science and Informatics,<br>Bolyai Institute                                                                           | -                               |  |  |
|                    | Elective subject 1                              | 2          |       | 2      |                    |                                                                                                                                   | -                               |  |  |
|                    | Foreign language                                | 2          |       | 0      |                    |                                                                                                                                   | -                               |  |  |
|                    | Physical Education                              | 1          |       | 0      |                    |                                                                                                                                   | -                               |  |  |
|                    | IN TOTAL                                        | :          | 28    | 26     |                    |                                                                                                                                   |                                 |  |  |

| Subject         | Subject name                             | Hours | s/week | Credit | Form of                 | Institute responsible for teaching                                                                                                | Precondition                                                                   |
|-----------------|------------------------------------------|-------|--------|--------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| code            |                                          | Lect  | Pract  |        | evaluation              | the subject                                                                                                                       |                                                                                |
|                 | T                                        |       |        | Year   | <b>I, Semester I</b>    |                                                                                                                                   | 1                                                                              |
| GYTK22A-<br>106 | Anatomy 2 (lect)                         | 2     |        | 2      | exam                    | Albert Szent-Györgyi Medical School,<br>Department of Anatomy                                                                     | Anatomy 1 (ER)                                                                 |
| GYTK22A-<br>107 | Physiology 2 (lect)                      | 4     |        | 4      | comprehen-<br>sive exam | Albert Szent-Györgyi Medical School,<br>Department of Physiology                                                                  | Anatomy (lect) 1 (ER)<br>Physiology 1 (lect) (ER)<br>Physiology 2 (pract) (ER) |
| GYTK22A-<br>108 | Physiology 2 (pract)                     |       | 2      | 2      | term mark               | Albert Szent-Györgyi Medical School,<br>Department of Physiology                                                                  | Physiology 1 (pract)                                                           |
| GYTK22A-<br>205 | Biostatistics (lect)                     | 1     |        | 3      | exam                    | Albert Szent-Györgyi Medical School,<br>Faculty of Science and Informatics,<br>Department of Medical Physics and In-<br>formatics | Mathematics (lect)                                                             |
| GYTK22A-<br>206 | Biostatistics (prac)                     |       | 1      | 0      | signature               | Albert Szent-Györgyi Medical School,<br>Faculty of Science and Informatics,<br>Department of Medical Physics and In-<br>formatics | Mathematics (lect)                                                             |
| GYTK22A-<br>207 | Physics, Biophysics (lect)               | 4     |        | 5      | exam                    | Faculty of Science and Informatics,<br>Department of Experimental Physics                                                         | -                                                                              |
| GYTK22A-<br>208 | Physics, Biophysics (pract)              |       | 2      | 2      | term mark               | Faculty of Science and Informatics,<br>Department of Experimental Physics                                                         | -                                                                              |
| GYTK22A-<br>209 | Quantitative Chemical Analysis<br>(lect) | 2     |        | 3      | exam                    | Faculty of Science and Informatics,<br>Department of Inorganic and Analytical<br>Chemistry                                        | General Chemistry (lect)                                                       |
| GYTK22A-<br>301 | Qualitative Chemical Analysis<br>(lect)  | 2     |        | 3      | exam                    | Faculty of Pharmacy, Institute of Phar-<br>maceutical Chemistry                                                                   | General Chemistry (lect)<br>Qualitative Chemical Analysis (pract)<br>(ER)      |
| GYTK22A-<br>302 | Qualitative Chemical Analysis<br>(pract) |       | 4      | 4      | term mark               | Faculty of Pharmacy, Institute of Phar-<br>maceutical Chemistry                                                                   | General Chemistry (lect)                                                       |
|                 | Elective subject 2                       | 2     |        | 2      |                         |                                                                                                                                   |                                                                                |
|                 | Foreign language                         | 2     |        | 0      |                         |                                                                                                                                   |                                                                                |
|                 | Physical Education                       | 1     |        | 0      |                         |                                                                                                                                   |                                                                                |
|                 | IN TOTAL                                 |       | 29     | 30     |                         |                                                                                                                                   |                                                                                |

| Subject             | Subject name                              | Hours | s/week | Credit | Form of    | Institute responsible for teaching                                                               | Precondition                                                                |  |
|---------------------|-------------------------------------------|-------|--------|--------|------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--|
| code                | Subject name                              | Lect  | Pract  |        | evaluation | the subject                                                                                      |                                                                             |  |
| Year II, Semester I |                                           |       |        |        |            |                                                                                                  |                                                                             |  |
| GYTK22A-<br>109     | Biochemistry (lect)                       | 4     |        | 4      | exam       | Albert Szent-Györgyi Medical School,<br>Department of Biochemistry                               | -                                                                           |  |
| GYTK22A-<br>110     | Pathophysiology 1 (lect)                  | 2     |        | 4      | exam       | Albert Szent-Györgyi Medical School,<br>Department of Pathophysiology                            | Physiology 2 (lect)                                                         |  |
| GYTK22A-<br>111     | Pathophysiology 1 (pract)                 |       | 2      | 0      | signature  | Albert Szent-Györgyi Medical School,<br>Department of Pathophysiology                            | Physiology 2 (lect)                                                         |  |
| GYTK22A-<br>112     | Microbiology (lect)                       | 3     |        | 3      | exam       | Albert Szent-Györgyi Medical School,<br>Department of Medical Microbiology                       | Pharmaceutical Cell Biology and Genet-<br>ics (lect)<br>Physiology 2 (lect) |  |
| GYTK22A-<br>113     | Microbiology (pract)                      |       | 2      | 2      | term mark  | Albert Szent-Györgyi Medical School,<br>Department of Medical Microbiology                       | Pharmaceutical Cell Biology and Genet-<br>ics (lect)<br>Physiology 2 (lect) |  |
| GYTK22A-<br>114     | Immunology (lect)                         | 1     |        | 1      | exam       | Albert Szent-Györgyi Medical School,<br>Department of Immunology                                 | Pharmaceutical Cell Biology and Genet-<br>ics (lect)<br>Physiology 2 (lect) |  |
| GYTK22A-<br>210     | Physical and Colloid Chemistry<br>(lect)  | 2     |        | 3      | exam       | Faculty of Science and Informatics,<br>Department of Physical Chemistry and<br>Materials Science | Mathematics (lect)<br>General Chemistry (lect)                              |  |
| GYTK22A-<br>211     | Quantitative Chemical Analysis<br>(pract) |       | 3      | 3      | term mark  | Faculty of Science and Informatics,<br>Department of Inorganic and Analytical<br>Chemistry       | Quantitative Chemical Analysis (lect)                                       |  |
| GYTK22A-<br>303     | Organic Chemistry 1 (lect)                | 4     |        | 5      | exam       | Faculty of Pharmacy,<br>Institute of Pharmaceutical Chemistry                                    | General Chemistry (lect)<br>Organic Chemistry (pract) (ER)                  |  |
| GYTK22A-<br>304     | Organic Chemistry (pract)                 |       | 6      | 5      | term mark  | Faculty of Pharmacy,<br>Institute of Pharmaceutical Chemistry                                    | General Chemistry (lect)<br>Qualitative Chemical Analysis (lect)            |  |
|                     | Foreign language                          | 2     |        | 0      |            |                                                                                                  |                                                                             |  |
|                     | IN TOTAL                                  |       | 31     | 30     |            |                                                                                                  |                                                                             |  |

| Subject<br>code      | Subject name                                                    | Hours/week |       | Credit | Form of                 | Institute responsible for teaching                                                               | Precondition                                             |  |  |  |
|----------------------|-----------------------------------------------------------------|------------|-------|--------|-------------------------|--------------------------------------------------------------------------------------------------|----------------------------------------------------------|--|--|--|
|                      |                                                                 | Lect       | Pract |        | evaluation              | the subject                                                                                      |                                                          |  |  |  |
| Year II, Semester II |                                                                 |            |       |        |                         |                                                                                                  |                                                          |  |  |  |
| GYTK22A-<br>115      | Pathophysiology 2 (lect)                                        | 2          |       | 4      | exam                    | Albert Szent-Györgyi Medical School,<br>Department of Pathophysiology                            | Pathophysiology 1 (lect) (ER)                            |  |  |  |
| GYTK22A-<br>116      | Pathophysiology 2 (pract)                                       |            | 2     | 0      | signature               | Albert Szent-Györgyi Medical School,<br>Department of Pathophysiology                            | Pathophysiology 1 (pract)                                |  |  |  |
| GYTK22A-<br>117      | Public Health and Preventive<br>Medicine (lect)                 | 2          |       | 2      | exam                    | Albert Szent-Györgyi Medical School,<br>Department of Public Health                              | Pathophysiology 1 (lect)<br>Microbiology (lect)          |  |  |  |
| GYTK22A-<br>212      | Physical and Colloid Chemistry<br>(pract)                       |            | 4     | 3      | term mark               | Faculty of Science and Informatics,<br>Department of Physical Chemistry and<br>Materials Science | Physical and Colloid Chemistry (lect)                    |  |  |  |
| GYTK22A-<br>305      | Organic Chemistry 2 (lect)                                      | 3          |       | 5      | comprehen-<br>sive exam | Faculty of Pharmacy,<br>Institute of Pharmaceutical Chemistry                                    | Organic Chemistry 1 (lect)                               |  |  |  |
| GYTK22A-<br>401      | History of Pharmacy and Phar-<br>maceutical Propedeutics (lect) | 3          |       | 3      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs         | -                                                        |  |  |  |
| GYTK22A-<br>501      | Pharmaceutical Botany (lect)                                    | 3          |       | 3      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmacognosy                                               | -                                                        |  |  |  |
| GYTK22A-<br>502      | Pharmaceutical Botany (pract)                                   |            | 2     | 2      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmacognosy                                               | -                                                        |  |  |  |
| GYTK22A-<br>601      | Inorganic Chemistry (lect)                                      | 3          |       | 4      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmaceutical Analysis                                     | General Chemistry (lect)                                 |  |  |  |
| GYTK22A-<br>901      | Summer internship 1                                             |            | 40    | 0      | signature               |                                                                                                  | History of Pharmacy and Pharmaceuti-<br>cal Propedeutics |  |  |  |
|                      | Elective subject 3                                              | 2          |       | 2      |                         |                                                                                                  |                                                          |  |  |  |
|                      | Elective subject 4                                              | 2          |       | 2      |                         |                                                                                                  |                                                          |  |  |  |
|                      | Foreign language                                                | 2          |       | 0      |                         |                                                                                                  |                                                          |  |  |  |
| IN TOTAL             |                                                                 |            | 30    | 30     |                         |                                                                                                  |                                                          |  |  |  |

| Subject<br>code      | Subject name                                              | Hours/week |       |        | Form of    | Institute responsible for teaching                                                       |                                                                                                                   |  |  |
|----------------------|-----------------------------------------------------------|------------|-------|--------|------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--|--|
|                      |                                                           | Lect       | Pract | Credit | evaluation | the subject                                                                              | Precondition                                                                                                      |  |  |
| Year III, Semester I |                                                           |            |       |        |            |                                                                                          |                                                                                                                   |  |  |
| GYTK22A-<br>306      | Pharmaceutical Chemistry 1<br>(lect)                      | 4          |       | 4      | exam       | Faculty of Pharmacy,<br>Institute of Pharmaceutical Chemistry                            | Quantitative Chemical Analysis (lect)<br>Organic Chemistry 2 (lect)<br>Pharmaceutical Chemistry 1 (pract)<br>(ER) |  |  |
| GYTK22A-<br>307      | Pharmaceutical Chemistry 1<br>(pract)                     |            | 6     | 5      | term mark  | Faculty of Pharmacy,<br>Institute of Pharmaceutical Chemistry                            | Qualitative Chemical Analysis (lect)<br>Quantitative Chemical Analysis (pract)<br>Organic Chemistry 2 (lect)      |  |  |
| GYTK22A-<br>402      | Ethics in Pharmacy (lect)                                 | 1          |       | 2      | exam       | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | History of Pharmacy and Pharmaceuti-<br>cal Propedeutics                                                          |  |  |
| GYTK22A-<br>403      | Ethics in Pharmacy (pract)                                |            | 1     | 0      | signature  | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | History of Pharmacy and Pharmaceuti-<br>cal Propedeutics<br>Ethics in Pharmacy                                    |  |  |
| GYTK22A-<br>404      | Pharmaceutical Technology 1<br>(lect)                     | 2          |       | 2      | exam       | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | Physical and Colloid Chemistry (lect)<br>(ER)<br>History of Pharmacy and Pharmaceuti-<br>cal Propedeutics         |  |  |
| GYTK22A-<br>405      | Pharmaceutical Communication (pract)                      |            | 2     | 2      | term mark  | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | History of Pharmacy and Pharmaceuti-<br>cal Propedeutics                                                          |  |  |
| GYTK22A-<br>503      | Pharmacognosy 1 (lect)                                    | 2          |       | 2      | exam       | Faculty of Pharmacy,<br>Institute of Pharmacognosy                                       | Organic Chemistry 2 (lect)<br>Pharmaceutical Botany (lect)<br>Pharmaceutical Botany (pract)                       |  |  |
| GYTK22A-<br>504      | Pharmacognosy 1 (pract)                                   |            | 4     | 3      | term mark  | Faculty of Pharmacy,<br>Institute of Pharmacognosy                                       | Organic Chemistry 2 (lect)<br>Pharmaceutical Botany (lect)<br>Pharmaceutical Botany (pract)                       |  |  |
| GYTK22A-<br>701      | Natural Treatments and Comple-<br>mentary Medicine (lect) | 2          |       | 2      | exam       | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and Bi-<br>opharmacy               | Pathophysiology 1 (lect)                                                                                          |  |  |
| GYTK22A-<br>801      | Dietetics (lect)                                          | 2          |       | 3      | exam       | Faculty of Pharmacy,<br>Institute of Clinical Pharmacy                                   | Physiology 2 (lect)                                                                                               |  |  |
|                      | Elective subject 5                                        | 2          |       | 2      |            |                                                                                          |                                                                                                                   |  |  |
|                      | Elective subject 6                                        | 2          |       | 2      |            |                                                                                          |                                                                                                                   |  |  |
|                      | IN TOTAL                                                  |            | 30    | 29     |            |                                                                                          |                                                                                                                   |  |  |

| Subject               | Subject name                                                   | Hours | s/week | Credit | Form of                 | Institute responsible for teaching                                                       | Precondition                                                                                |  |
|-----------------------|----------------------------------------------------------------|-------|--------|--------|-------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--|
| code                  |                                                                | Lect  | Pract  |        | evaluation              | the subject                                                                              |                                                                                             |  |
| Year III, Semester II |                                                                |       |        |        |                         |                                                                                          |                                                                                             |  |
| GYTK22A-<br>308       | Pharmaceutical Chemistry 2<br>(lect)                           | 4     |        | 5      | comprehen-<br>sive exam | Faculty of Pharmacy,<br>Institute of Pharmaceutical Chemistry                            | Pharmaceutical Chemistry 1 (lect)<br>Pharmaceutical Chemistry 2 (pract)<br>(ER)             |  |
| GYTK22A-<br>309       | Pharmaceutical Chemistry 2<br>(pract)                          |       | 6      | 5      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmaceutical Chemistry                            | Pharmaceutical Chemistry 1 (lect)                                                           |  |
| GYTK22A-<br>406       | Pharmaceutical Technology 2<br>(lect)                          | 2     |        | 2      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | Pharmaceutical Technology 1 (lect)<br>(ER)                                                  |  |
| GYTK22A-<br>407       | Pharmaceutical Technology -<br>Prescription Pharmacy 1 (pract) |       | 3      | 3      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | History of Pharmacy and Pharmaceuti-<br>cal Propedeutics<br>Pharmaceutical Technology 1 (P) |  |
| GYTK22A-<br>408       | Pharmaceutical Technology - Ga-<br>lenic preparations (pract)  |       | 3      | 3      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | History of Pharmacy and Pharmaceuti-<br>cal Propedeutics<br>Pharmaceutical Technology 1 (P) |  |
| GYTK22A-<br>409       | Pharmaceutical Technology -<br>Aseptic preparations (pract)    |       | 3      | 3      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | History of Pharmacy and Pharmaceuti-<br>cal Propedeutics<br>Pharmaceutical Technology 1 (P) |  |
| GYTK22A-<br>505       | Pharmacognosy 2 (lect)                                         | 2     |        | 3      | comprehen-<br>sive exam | Faculty of Pharmacy,<br>Institute of Pharmacognosy                                       | Pharmacognosy 1 (lect)                                                                      |  |
| GYTK22A-<br>506       | Pharmacognosy 2 (pract)                                        |       | 4      | 3      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmacognosy                                       | Pharmacognosy 1 (pract)                                                                     |  |
| GYTK22A-<br>702       | Biopharmacy (lect)                                             | 2     |        | 2      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy                 | Physiology 2 (lect)<br>Biochemistry<br>Biopharmacy (pract) (ER)                             |  |
| GYTK22A-<br>703       | Biopharmacy (pract)                                            |       | 3      | 2      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy                 | Mathematics (pract)<br>Physiology 2 (lect)<br>Biochemistry (lect)                           |  |
|                       | IN TOTAL 32                                                    |       |        | 31     |                         |                                                                                          |                                                                                             |  |

| Subject          | Subject name                                                   | Hours | s/week | Credit | Form of      | Institute responsible for teaching                                                       | Precondition                                                                                  |
|------------------|----------------------------------------------------------------|-------|--------|--------|--------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| code             | Subject nume                                                   | Lect  | Pract  |        | evaluation   | the subject                                                                              |                                                                                               |
|                  |                                                                |       |        | Year   | IV, Semester |                                                                                          |                                                                                               |
| GYTK22A-<br>410  | Pharmaceutical Technology 3                                    | 2     |        | 2      | exam         | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | Pharmaceutical Technology 2 (lect)<br>(ER)                                                    |
| GYTK22A-<br>411  | Pharmaceutical Technology -<br>Prescription Pharmacy 2 (pract) |       | 3      | 3      | term mark    | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | Pharmaceutical Technology - Prescrip-<br>tion Pharmacy 1 (pract)                              |
| GYTK22A-<br>412  | Pharmaceutical Technology -<br>Solid Dosage Forms (pract)      |       | 4      | 3      | term mark    | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | Pharmaceutical Technology - Galenic<br>preparations (pract)                                   |
| GYTK22A-<br>413  | Drug Regulatory Affairs 1 (lect)                               | 3     |        | 3      | exam         | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology<br>and Regulatory Affairs | Pharmaceutical Technology 2 (lect)                                                            |
| GYTK22A-<br>602  | Pharmaceutical Analysis (lect)                                 | 3     |        | 3      | exam         | Faculty of Pharmacy,<br>Institute of Pharmaceutical Analysis                             | Pharmaceutical Chemistry 2 (lect)<br>Pharmaceutical Analysis (pract) (ER)                     |
| GYTK22A-<br>603  | Pharmaceutical Analysis (pract)                                |       | 5      | 4      | term mark    | Faculty of Pharmacy,<br>Institute of Pharmaceutical Analysis                             | Pharmaceutical Chemistry 2 (lect)                                                             |
| GYTK22A-<br>704  | Pharmacodynamics 1 (lect)                                      | 3     |        | 3      | exam         | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy                 | Pathophysiology 2 (lect)<br>Biopharmacy (lect)<br>Pharmacodynamics 1 (pract) (ER)             |
| GYTK22A-<br>705  | Pharmacodynamics 1 (pract)<br>(ER)                             |       | 3      | 2      | term mark    | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy                 | Pathophysiology 2 (lect)<br>Biopharmacy (lect)                                                |
| GYTK22A-<br>802  | Medical Aids and Equipment<br>(lect)                           | 2     |        | 2      | exam         | Faculty of Pharmacy,<br>Institute of Clinical Pharmacy                                   | Drug Regulatory Affairs 1 (lect) (P)                                                          |
| GYTK22A-<br>902  | Professional Internship 2                                      |       | 40     |        | signature    |                                                                                          | Pharmaceutical Technology 1 (lect)                                                            |
| GYTK22A-<br>1001 | Preparation of Diploma Work 1                                  |       | 2      | 3      | term mark    |                                                                                          | Pharmaceutical Technology 2 (lect)<br>Pharmaceutical Chemistry 2 (lect)<br>Biopharmacy (lect) |
|                  | Elective subject 7                                             | 2     |        | 2      |              |                                                                                          |                                                                                               |
|                  | IN TOTAL                                                       |       | 32     | 30     |              |                                                                                          |                                                                                               |

| Subject          | Subject name                                                            | Hours | s/week | Credit | Form of                 | Institute responsible for teaching                                                       | Precondition                                                                                                                                                                                |
|------------------|-------------------------------------------------------------------------|-------|--------|--------|-------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| code             | Subject name                                                            | Lect  | Pract  | cieuit | evaluation              | the subject                                                                              | riecondition                                                                                                                                                                                |
|                  |                                                                         |       |        | Year   | IV, Semester            | II                                                                                       |                                                                                                                                                                                             |
| GYTK22A-414      | Pharmaceutical Technology 4 (lect)                                      | 2     |        | 4      | comprehen-<br>sive exam | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology and<br>Regulatory Affairs | Pharmaceutical Technology 3 (ER)                                                                                                                                                            |
| GYTK22A-415      | Pharmaceutical Technology -<br>Prescription Pharmacy 3 (pract)          |       | 3      | 3      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology and<br>Regulatory Affairs | Pharmaceutical Technology - Prescription<br>Pharmacy 2 (pract)                                                                                                                              |
| GYTK22A-416      | Pharmaceutical Technology -<br>Investigation of Dosage Forms<br>(pract) |       | 4      | 3      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology and<br>Regulatory Affairs | Pharmaceutical Technology - Galenic prepa-<br>rations (pract)<br>Pharmaceutical Technology - Aseptic prepa-<br>rations (pract)<br>Pharmaceutical Technology - Solid Dosage<br>Forms (pract) |
| GYTK22A-417      | Drug Regulatory Affairs 2 (lect)                                        | 3     |        | 4      | comprehen-<br>sive exam | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology and<br>Regulatory Affairs | Drug Regulatory Affairs 1 (lect) (ER)                                                                                                                                                       |
| GYTK22A-418      | Pharmaceutical Informatics (pract)                                      |       | 2      | 3      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmaceutical Technology and<br>Regulatory Affairs | Pharmaceutical Technology 4 (P)                                                                                                                                                             |
| GYTK22A-507      | Phythotherapy (lect)                                                    | 2     |        | 2      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmacognosy                                       | Pharmacognosy 2 (lect) (P)<br>Pharmacodynamics 2 (lect) (P)                                                                                                                                 |
| GYTK22A-604      | Pharmaceutical Biotechnology (lect)                                     | 2     |        | 2      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmaceutical Analysis                             | Biochemistry (lect)<br>Immunology (lect)                                                                                                                                                    |
| GYTK22A-706      | Pharmacodynamics 2 (lect)                                               | 3     |        | 3      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy                 | Pharmacodynamics 1 (lect)<br>Pharmacodynamics 2 (pract) (ER)                                                                                                                                |
| GYTK22A-707      | Pharmacodynamics 2 (pract)                                              |       | 3      | 2      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy                 | Pharmacodynamics 1 (pract)                                                                                                                                                                  |
| GYTK22A-708      | Clinical Laboratory Investigation<br>(lect)                             | 2     |        | 2      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy                 | Pathophysiology 2 (lect)                                                                                                                                                                    |
| GYTK22A-803      | First Aid és Nursing (lect)                                             | 2     |        | 2      | exam                    | Faculty of Pharmacy,<br>Institute of Clinical Pharmacy                                   | Pharmacodynamics 1 (lect)                                                                                                                                                                   |
| GYTK22A-804      | Clinical Pharmacy and Pharmaceuti-<br>cal Care 1 (pract)                |       | 2      | 2      | term mark               | Faculty of Pharmacy, Institute of Clinical<br>Pharmacy                                   | Pharmacodynamics 1 (lect)<br>Public Health and Preventive Medicine<br>(lect)                                                                                                                |
| GYTK22A-<br>1002 | Preparation of Diploma Work 2                                           |       | 2      | 3      | term mark               |                                                                                          | Preparation of Diploma Work 1                                                                                                                                                               |
|                  | IN TOTAL                                                                | 3     | 32     | 35     |                         |                                                                                          |                                                                                                                                                                                             |

| Subject          |                                                          | Hour | s/week |        | Form of                 | Institute responsible for teaching                                       | <b>D</b>                                                                            |
|------------------|----------------------------------------------------------|------|--------|--------|-------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| code             | Subject name                                             | Lect | Pract  | Credit | evaluation              | the subject                                                              | Precondition                                                                        |
|                  |                                                          |      |        | Year   | r V, semester           | [                                                                        |                                                                                     |
| GYTK22A-<br>709  | Veterinary Pharmacy (lect)                               | 2    |        | 2      | exam                    | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy | Pharmacodynamics 2 (lect)                                                           |
| GYTK22M-<br>710  | Pharmacodynamics 3 (lect)                                | 3    |        | 4      | comprehen-<br>sive exam | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy | Pharmacodynamics 2 (lect)<br>Pharmacodynamics 3 (pract) (ER)                        |
| GYTK22A-<br>711  | Pharmacodynamics 3 (pract)                               |      | 3      | 2      | term mark               | Faculty of Pharmacy,<br>Institute of Pharmacodynamics and<br>Biopharmacy | Pharmacodynamics 2 (pract)                                                          |
| GYTK22A-<br>805  | First Aid és Nursing (lect)                              |      | 2      | 2      | term mark               | Faculty of Pharmacy,<br>Institute of Clinical Pharmacy                   | Pharmacodynamics 2 (lect)<br>First Aid és Nursing (lect)                            |
| GYTK22A-<br>806  | Clinical Pharmacy and Pharma-<br>ceutical Care 1 (pract) | 2    |        | 2      | exam                    | Faculty of Pharmacy,<br>Institute of Clinical Pharmacy                   | Clinical Pharmacy and Pharmaceutical<br>Care 1 (pract)<br>Pharmacodynamics 2 (lect) |
| GYTK22A-<br>807  | Clinical Pharmacy and Pharma-<br>ceutical Care 2 (pract) |      | 3      | 2      | term mark               | Faculty of Pharmacy,<br>Institute of Clinical Pharmacy                   | Clinical Pharmacy and Pharmaceutical<br>Care 1 (pract)<br>Pharmacodynamics 2 (lect) |
| GYTK22A-<br>808  | Clinical Disciplines and Clinical<br>Drug Therapy (lect) | 3    |        | 3      | exam                    | Faculty of Pharmacy,<br>Institute of Clinical Pharmacy                   | Pharmacodynamics 2 (lect)                                                           |
| GYTK22A-<br>903  | Pharmacy Internship 1                                    |      | 40     | 8      | term mark               |                                                                          |                                                                                     |
| GYTK22A-<br>1003 | Preparation of Diploma Work 3                            |      | 2      | 4      | term mark               |                                                                          | Preparation of Diploma Work 2                                                       |
|                  | Compulsory Elective Subjects                             | 10   |        | 10     |                         |                                                                          |                                                                                     |
|                  | Elective subject 8                                       | 2    |        | 2      |                         |                                                                          |                                                                                     |
|                  | IN TOTAL                                                 |      | 32     | 41     |                         |                                                                          |                                                                                     |

| Subject<br>code | Subject name          | Hours/week |    | Credit     |               | Institute responsible for teaching the subject | Precondition |
|-----------------|-----------------------|------------|----|------------|---------------|------------------------------------------------|--------------|
| coue            |                       | Lect Pract |    | evaluation |               | the subject                                    |              |
|                 |                       |            |    | Year       | V, semester I | [                                              |              |
| GYTK22A-<br>904 | Pharmacy Internship 2 |            | 40 | 16         | term mark     |                                                |              |

\*The number of hours varies depending on the chosen courses.

| Subject           | Subject name                                          | Hours | s/week | Credit | Form of    | Institute responsible for teaching                                                         | Precondition                                                                                       |  |  |  |  |  |  |
|-------------------|-------------------------------------------------------|-------|--------|--------|------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| code              | Subject name                                          | Lect  | Pract  | Great  | evaluation | the subject                                                                                |                                                                                                    |  |  |  |  |  |  |
|                   | Compulsory Elective Subjects                          |       |        |        |            |                                                                                            |                                                                                                    |  |  |  |  |  |  |
| GYTK22A-<br>132KV | Evidence-Based Prevention and Health Promotion (lect) | 2     | 2      | 2      | exam       | Albert Szent-Györgyi Medical School,<br>Department of Public Health                        | Public Health and Preventive Medicine (lect)                                                       |  |  |  |  |  |  |
| GYTK22A-<br>433KV | Quality Assurance (lect)                              | 3     | 3      | 3      | exam       | Faculty of Pharmacy, Institute of Phar-<br>maceutical Technology and Regulatory<br>Affairs | Pharmaceutical Technology 4 (lect)                                                                 |  |  |  |  |  |  |
| GYTK22A-<br>631KV | Biopharmaceuticals (lect)                             | 2     | 2      | 2      | exam       | Faculty of Pharmacy, Institute of Phar-<br>maceutical Analysis                             | Pharmaceutical Cell Biology and<br>Genetics (lect)<br>Biochemistry (lect)                          |  |  |  |  |  |  |
| GYTK22A-<br>731KV | Clinical Laboratory<br>Investigations (pract)         | 1     | 1      | 2      | term mark  | Faculty of Pharmacy, Institute of Phar-<br>macodynamics and Biopharmacy                    | Clinical Laboratory Investigations (lect)                                                          |  |  |  |  |  |  |
| GYTK22A-<br>831KV | Clinical Pharmacy and<br>Pharmaceutical Care 2 (lect) | 2     | 2      | 2      | exam       | Faculty of Pharmacy, Institute of Clini-<br>cal Pharmacy                                   | Public Health and Preventive Medicine<br>(lect)<br>Biopharmacy (lect)<br>Pharmacodynamics 2 (lect) |  |  |  |  |  |  |

| Subject            | Subject name                               | Hour | s/week | Credit        | Form of                    | Institute responsible for teaching                                     | Precondition |
|--------------------|--------------------------------------------|------|--------|---------------|----------------------------|------------------------------------------------------------------------|--------------|
| code               | Subject name                               | Lect | Pract  | cicuit        | evaluation                 | the subject                                                            | Trecondition |
|                    |                                            |      | Ele    | ctive subject | s (1st and 2nd             | semesters)                                                             |              |
| GYTK22A-<br>151SZV | Frontiers of Molecular Biology 1           | 2    |        | 2             | Evaluation<br>(five-grade) | Albert Szent-Györgyi Medical School,<br>Department of Medical Biology  | -            |
| GYTK22A-<br>152SZV | Frontiers of Molecular Biology 2           | 2    |        | 2             | Evaluation<br>(five-grade) | Albert Szent-Györgyi Medical School,<br>Department of Medical Biology  | -            |
| GYTK22A-<br>153SZV | Humangenetics                              | 2    |        | 2             | Exam                       | Albert Szent-Györgyi Medical School,<br>Department of Medical Genetics | -            |
| GYTK22A-<br>551SZV | Chromatography                             | 2    |        | 2             | Evaluation<br>(five-grade) | Institute of Pharmacognosy                                             | -            |
| GYTK22A-<br>555SZV | Introduction to the Academic Re-<br>search | 2    |        | 2             | Evaluation<br>(five-grade) | Institute of Pharmacognosy                                             | -            |
| GYTK22A-<br>651SZV | General Laws in Chemistry                  | 2    |        | 2             | Evaluation<br>(five-grade) | Institute of Pharmaceutical Analysis                                   | -            |
| GYTK22A-<br>652SZV | Bioinorganic Chemistry                     | 2    |        | 2             | Evaluation<br>(five-grade) | Institute of Pharmaceutical Analysis                                   | -            |
| GYTK22A-<br>654SZV | Radiochemistry                             | 2    |        | 2             | Evaluation<br>(five-grade) | Institute of Pharmaceutical Analysis                                   | -            |
| GYTK22A-<br>002    | Hungarian Language and Culture<br>1        | 2    |        | 2             | Evaluation<br>(five-grade) |                                                                        |              |
| GYTK22A-<br>004    | Hungarian Language and Culture<br>2        | 2    |        | 2             | Evaluation<br>(five-grade) |                                                                        |              |

|                    |                                |   | Ele | ective subjec | ts (3rd to 9th             | semesters)                                                    |  |
|--------------------|--------------------------------|---|-----|---------------|----------------------------|---------------------------------------------------------------|--|
| GYTK22A-<br>352SZV | Computerised Literature Survey | 1 |     | 2             | Evaluation<br>(five-grade) | Faculty of Pharmacy,<br>Institute of Pharmaceutical Chemistry |  |
| GYTK22A-<br>006    | Hungarian Language 1           | 2 |     | 2             | Evaluation<br>(five-grade) |                                                               |  |
| GYTK22A-<br>007    | Hungarian Language 2           | 2 |     | 2             | Evaluation<br>(five-grade) |                                                               |  |

#### **CURRENT CURRICULUM OF THE PHARMACY TRAINING IN THE ACADEMIC YEAR 2023/2024**

# The current curriculum for the 2023/2024 academic year for third- and fifth-year students (OSZKGYO\_N\_EN\_2017) who started their studies between 2017 and 2022 can be seen in the table below:

| 'ear III, Semest |                             | <u> </u> |         |           |        |             |                                                                            | Precondition                                                                                                                                          |
|------------------|-----------------------------|----------|---------|-----------|--------|-------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course Code      | Course name                 | ŀ        | lours/w | veek      | Credit | Form of ex- | Institute responsible for teach-                                           | Precondition<br>Parallel Completion (P) or                                                                                                            |
|                  |                             | Lect     | Pract   | Lab Pract |        | amination   | ing the subject                                                            | Examination Requirement (ER)                                                                                                                          |
| ompulsory Sul    | bjects:                     |          |         |           |        |             |                                                                            |                                                                                                                                                       |
| GYTKKAM181       | Pharmacognosy 1             | 2        |         |           | 2      | Exam        | Institute of Pharmacognosy                                                 | GYTKKAM123 - Organic Chemistry 2 (lect)<br>GYTKKAM142 - Pharmaceutical Botany (lect)<br>GYTKKAM143 - Pharmaceutical Botany (pract)                    |
| GYTKKAM182       | Pharmacognosy 1             |          |         | 4         | 3      | Term Mark   | Institute of Pharmacognosy                                                 | GYTKKAM123 - Organic Chemistry 2 (lect)<br>GYTKKAM142 - Pharmaceutical Botany (lect)<br>GYTKKAM143 - Pharmaceutical Botany (pract)                    |
| GYTKKAM191       | Pathophysiology 1           | 2        |         |           | 4      | Exam        | Albert Szent-Györgyi Medical<br>School, Department of Pathophysi-<br>ology | GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM154 - Physiology 2 (pract)<br>GYTKKAM171 - Biochemistry (lect)                                             |
| GYTKKAM192       | Pathophysiology 1           |          | 2       |           | 0      | Signature   | Albert Szent-Györgyi Medical<br>School, Department of Pathophysi-<br>ology | GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM154 - Physiology 2 (pract)<br>GYTKKAM171 - Biochemistry (lect)                                             |
| GYTKKAM201       | Microbiology and Immunology | 4        |         |           | 4      | Exam        | Albert Szent-Györgyi Medical<br>School, Department of Microbiol-<br>ogy    | GYTKKAM071 - Pharmaceutical Biology (lect)<br>GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM171 - Biochemistry (lect)                                    |
| GYTKKAM202       | Microbiology and Immunology |          | 2       |           | 2      | Term Mark   | Albert Szent-Györgyi Medical<br>School, Department of Microbiol-<br>ogy    | GYTKKAM071 - Pharmaceutical Biology (lect)<br>GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM171 - Biochemistry (lect)                                    |
| GYTKKAM221       | Pharmaceutical Technology 1 | 2        |         |           | 2      | Evaluation  | Institute of Pharmaceutical Tech-<br>nology and Regulatory Affairs         | GYTKKAM131 - Physical Chemistry (lect)<br>GYTKKAM133 - Physical and Colloid Chemistry (pract)<br>GYTKKAM161 - Colloid Chemistry (lect)                |
| GYTKKAM231       | Pharmaceutical Chemistry 1  | 4        |         |           | 4      | Exam        | Institute of Pharmaceutical<br>Chemistry                                   | GYTKKAM101 - Quantitative Chemical Analysis (lect)<br>GYTKKAM123 - Organic Chemistry 2 (lect)<br>GYTKKAM232 - Pharmaceutical Chemistry 1 (pract) (ER) |
| GYTKKAM232       | Pharmaceutical Chemistry 1  |          |         | 6         | 5      | Term Mark   | Institute of Pharmaceutical<br>Chemistry                                   | GYTKKAM091 - Qualitative Chemical Analysis (lect)<br>GYTKKAM104 - Quantitative Chemical Analysis (pract)<br>GYTKKAM123 - Organic Chemistry 2 (lect)   |
| GYTKKAM281       | Ethics in Pharmacy          | 2        |         |           | 2      | Exam        | Institute of Pharmaceutical Tech-<br>nology and Regulatory Affairs         | GYTKKAM511 - Professional Internship 1                                                                                                                |
| N TOTAL          |                             |          | 30      |           | 28     |             |                                                                            |                                                                                                                                                       |
| lective subject  |                             | 1        | 1       |           | 1      |             |                                                                            |                                                                                                                                                       |
|                  | Elective subject 6          | 2        |         |           | 2      | Evaluation  |                                                                            |                                                                                                                                                       |

| Year III, semeste     | er II                                                  |      |            |              |    |                         |                                                                       |                                                                                                               |
|-----------------------|--------------------------------------------------------|------|------------|--------------|----|-------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Course Code           | Course name                                            |      | Hours/week |              |    | Form of ex-             | Institute responsible for teaching the                                | Precondition<br>Parallel Completion (P) or                                                                    |
|                       |                                                        | Lect | Pract      | Lab<br>pract |    | amination               | subject                                                               | Examination Requirement (ER)                                                                                  |
| <b>Compulsory Sub</b> | ojects:                                                |      |            |              |    |                         |                                                                       |                                                                                                               |
| GYTKKAM183            | Pharmacognosy 2                                        | 2    |            |              | 3  | Comprehen-<br>sive exam | Institute of Pharmacognosy                                            | GYTKKAM181 - Pharmacognosy 1 (lect)                                                                           |
| GYTKKAM184            | Pharmacognosy 2                                        |      |            | 4            | 3  | Term Mark               | Institute of Pharmacognosy                                            | GYTKKAM181 - Pharmacognosy 1 (lect)<br>GYTKKAM182 - Pharmacognosy 1 (pract)                                   |
| GYTKKAM193            | Pathophysiology 2                                      | 2    |            |              | 4  | Exam                    | Albert Szent-Györgyi Medical School,<br>Department of Pathophysiology | GYTKKAM191 - Pathophysiology 1 (lect)                                                                         |
| GYTKKAM194            | Pathophysiology 2                                      |      | 2          |              | 0  | Signature               | Albert Szent-Györgyi Medical School,<br>Department of Pathophysiology | GYTKKAM191 - Pathophysiology 1 (lect)<br>GYTKKAM192 - Pathophysiology 1 (pract)                               |
| GYTKKAM222            | Pharmaceutical Technology 2                            | 2    |            |              | 2  | Exam                    | Institute of Pharmaceutical Technology<br>and Regulatory Affairs      | GYTKKAM221 - Pharmaceutical Technology 1 (lect)                                                               |
| GYTKKAM223            | Pharmaceutical Technology -<br>Prescription Pharmacy 1 |      |            | 3            | 3  | Term Mark               | Institute of Pharmaceutical Technology<br>and Regulatory Affairs      | GYTKKAM221 - Pharmaceutical Technology 1 (lect)                                                               |
| GYTKKAM224            | Pharmaceutical Technology -<br>Galenic Preparations    |      |            | 3            | 3  | Term Mark               | Institute of Pharmaceutical Technology<br>and Regulatory Affairs      | GYTKKAM221 - Pharmaceutical Technology 1 (lect)                                                               |
| GYTKKAM233            | Pharmaceutical Chemistry 2                             | 4    |            |              | 5  | Comprehen-<br>sive exam | Institute of Pharmaceutical Chemistry                                 | GYTKKAM231 - Pharmaceutical Chemistry 1 (lect)<br>GYTKKAM234 - Pharmaceutical Chemistry 2 (pract)<br>(ER)     |
| GYTKKAM234            | Pharmaceutical Chemistry 2                             |      |            | 6            | 5  | Term Mark               | Institute of Pharmaceutical Chemistry                                 | GYTKKAM231 - Pharmaceutical Chemistry 1 (lect)<br>GYTKKAM232 - Pharmaceutical Chemistry 1 (pract)             |
| GYTKKAM241            | Biopharmacy                                            | 2    |            |              | 2  | Exam                    | Institute of Pharmacodynamics and Bio-<br>pharmacy                    | GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM171 - Biochemistry (lect)<br>GYTKKAM242 - Biopharmacy (pract) (ER) |
| GYTKKAM242            | Biopharmacy                                            |      | 3          |              | 2  | Term Mark               | Institute of Pharmacodynamics and Bio-<br>pharmacy                    | GYTKKAM021 - Mathematics (pract)<br>GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM171 - Biochemistry (lect)      |
| IN TOTAL              |                                                        |      | 33         |              | 32 |                         |                                                                       |                                                                                                               |

| Course Code      | Course name                                                            | Hours/week |       |              | Credit | Form of ex- | Institute responsible for                                                                | Precondition<br>Parallel Completion (P) or                                                                                           |
|------------------|------------------------------------------------------------------------|------------|-------|--------------|--------|-------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| course coue      |                                                                        | Lect       | Pract | Lab<br>pract |        | amination   | teaching the subject                                                                     | Examination Requirement (ER)                                                                                                         |
| ompulsory Sub    | jects:                                                                 |            |       |              |        |             |                                                                                          |                                                                                                                                      |
| GYTKKAM225       | Pharmaceutical Technology 3                                            | 2          |       |              | 2      | Evaluation  | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM222 - Pharmaceutical Technology 2 (lect)                                                                                      |
| GYTKKAM226       | Pharmaceutical Technology - Pre-<br>scription Pharmacy 2               |            | 3     |              | 3      | Term Mark   | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM222 - Pharmaceutical Technology 2 (lect)<br>GYTKKAM223 - Pharmaceutical Technology - Prescrip-<br>tion Pharmacy 1 (pract)     |
| GYTKKAM227       | Pharmaceutical Technology - Ster-<br>ile and Aseptic Drug Formulations |            | 3     |              | 3      | Term Mark   | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM222 - Pharmaceutical Technology 2 (lect)<br>GYTKKAM224 - Pharmaceutical Technology - Galenic<br>Preparation (pract)           |
| GYTKKAM251       | Pharmacodynamics 1                                                     | 3          |       |              | 3      | Exam        | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Bio-<br>pharmacy               | GYTKKAM193 - Pathophysiology 2 (lect)<br>GYTKKAM241 - Biopharmacy (lect)<br>GYTKKAM252 - Pharmacodynamics 1 (pract) (ER)             |
| GYTKKAM252       | Pharmacodynamics 1                                                     |            | 3     |              | 2      | Term Mark   | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Bio-<br>pharmacy               | GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM193 - Pathophysiology 2 (lect)<br>GYTKKAM241 - Biopharmacy (lect)                         |
| GYTKKAM261       | Pharmaceutical Analysis                                                | 3          |       |              | 3      | Exam        | Faculty of Pharmacy, Institute of Pharmaceutical Analysis                                | GYTKKAM233 - Pharmaceutical Chemistry 2 (lect)<br>GYTKM262 - Pharmaceutical Analysis (pract) (ER)                                    |
| GYTKKAM262       | Pharmaceutical Analysis                                                |            | 5     |              | 4      | Term Mark   | Faculty of Pharmacy, Institute of Pharmaceutical Analysis                                | GYTKKAM233 - Pharmaceutical Chemistry 2 (lect)                                                                                       |
| GYTKKAM271       | Public Health and Preventive Med-<br>icine                             | 2          |       |              | 2      | Exam        | Albert Szent-Györgyi Medical<br>School, Department of Public<br>Health                   | GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM193 - Pathophysiology 2 (lect)<br>GYTKM201 - Microbiology and Immunology (lect)           |
| GYTKKAM291       | Drug Regulatory Affairs 1                                              | 3          |       |              | 3      | Exam        | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM222 - Pharmaceutical Technology 2 (lect)                                                                                      |
| GYTKKAM411       | Biotechnology                                                          | 2          |       |              | 2      | Exam        | Faculty of Pharmacy, Institute of Pharmaceutical Analysis                                | GYTKKAM171 - Biochemistry (lect)<br>GYTKKAM183 - Pharmacognosy 2 (lect) (P)                                                          |
| GYTKKAM512       | Professional internship 2                                              |            | 40    |              |        | Signature   | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM221 - Pharmaceutical Technology 1 (lect)                                                                                      |
| GYTKKAM1211      | Preparation of Diploma Work 1                                          |            | 2     |              | 3      | Term Mark   | Institutes of the Faculty of Phar-<br>macy                                               | GYTKKAM222 - Pharmaceutical Technology 2 (lect)<br>GYTKKAM233 - Pharmaceutical Chemistry 2 (lect)<br>GYTKKAM241 - Biopharmacy (lect) |
| N TOTAL          |                                                                        |            | 31    |              | 30     |             |                                                                                          |                                                                                                                                      |
| lective subjects | ;:<br>;:                                                               |            |       |              |        |             |                                                                                          | L                                                                                                                                    |
|                  | Elective subject 7                                                     | 2          |       |              | 2      | Evaluation  |                                                                                          |                                                                                                                                      |

| Course Code     | Course name                                                  | Hours/week |       |           | Credit | Form of ex-<br>amination | Institute responsible for<br>teaching the subject                                        | Precondition<br>Parallel Completion (P) or                                                                                                                                                                                                                           |
|-----------------|--------------------------------------------------------------|------------|-------|-----------|--------|--------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |                                                              | Lect       | Pract | Lab pract |        | unnation                 | teaching the subject                                                                     | Examination Requirement (ER)                                                                                                                                                                                                                                         |
| ompulsory Subje | cts:                                                         |            | -     |           |        | •                        |                                                                                          |                                                                                                                                                                                                                                                                      |
| GYTKKAM228      | Pharmaceutical Technology 4                                  | 2          |       |           | 4      | Comprehen-<br>sive exam  | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM229 - Pharmaceutical Technology - Prescrip-<br>tion Pharmacy 3 (pract) (ER)<br>GYTKKAM595 - Pharmaceutical Technology - Tablet and<br>Tablet Coating (pract) (ER)<br>GYTKKAM596 - Pharmaceutical Technology - Investiga-<br>tion of Dosage Forms (pract) (ER) |
| GYTKKAM229      | Pharmaceutical Technology -<br>Prescription Pharmacy 3       |            | 3     |           | 3      | Term Mark                | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM225 - Pharmaceutical Technology 3 (lect)<br>GYTKKAM226 - Pharmaceutical Technology - Prescrip-<br>tion Pharmacy 2 (pract)                                                                                                                                     |
| GYTKKAM253      | Pharmacodynamics 2                                           | 3          |       |           | 3      | Exam                     | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Bio-<br>pharmacy               | GYTKKAM251 - Pharmacodynamics 1 (lect)<br>GYTKKAM254 - Pharmacodynamics 2 (pract) (ER)                                                                                                                                                                               |
| GYTKKAM254      | Pharmacodynamics 2                                           |            | 3     |           | 2      | Term Mark                | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Bio-<br>pharmacy               | GYTKKAM251 - Pharmacodynamics 1 (lect)                                                                                                                                                                                                                               |
| GYTKKAM311      | Drug Regulatory Affairs 2                                    | 3          |       |           | 4      | Comprehen-<br>sive exam  | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM291 - Drug Regulatory Affairs 1 (lect)                                                                                                                                                                                                                        |
| GYTKKAM351      | Pharmaceutical Care 1                                        |            | 2     |           | 2      | Term Mark                | Faculty of Pharmacy, Institute of<br>Clinical Pharmacy                                   | GYTKKAM251 - Pharmacodynamics 1 (lect)<br>GYTKKAM271 - Public Health and Preventive Medicine<br>(lect)                                                                                                                                                               |
| GYTKKAM461      | Phytotherapy                                                 | 2          |       |           | 2      | Exam                     | Faculty of Pharmacy, Institute of Pharmacognosy                                          | GYTKKAM183 - Pharmacognosy 2 (lect)                                                                                                                                                                                                                                  |
| GYTKKAM481      | Clinical Laboratory Practice                                 | 2          |       |           | 2      | Exam                     | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Bio-<br>pharmacy               | GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM193 - Pathophysiology 2 (lect)                                                                                                                                                                                            |
| GYTKKAM595      | Pharmaceutical Technology -<br>Tablet and Tablet Coating     |            | 4     |           | 3      | Term Mark                | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM225 - Pharmaceutical Technology 3 (lect)<br>GYTKKAM227 - Pharmaceutical Technology - Sterile and<br>Aseptic Drug Formulations (pract)                                                                                                                         |
| GYTKKAM596      | Pharmaceutical Technology -<br>Investigation of Dosage Forms |            | 4     |           | 3      | Term Mark                | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM225 - Pharmaceutical Technology 3 (lect)                                                                                                                                                                                                                      |
| GYTKKAM991      | Pharmacy Administration                                      |            | 1     |           | 1      | Term Mark                | Faculty of Pharmacy, Institute of<br>Clinical Pharmacy                                   | GYTKKAM291 - Drug Regulatory Affairs 1 (lect)                                                                                                                                                                                                                        |
| GYTKKAM1221     | Preparation of Diploma Work 2                                |            | 2     |           | 3      | Term Mark                | Institutes of the Faculty of Phar-<br>macy                                               | GYTKKAM1221 - Preparation of Diploma Work 1 (pract                                                                                                                                                                                                                   |

| Year V, semester      | ·I                                                      |      |         |              |        |                          |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------|---------------------------------------------------------|------|---------|--------------|--------|--------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course Code           | Course name                                             | Н    | ours/we | ek           | Credit | Form of ex-<br>amination | Institute responsible for teach-<br>ing the subject                                      | Precondition<br>Parallel Completion (P) or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                       |                                                         | Lect | Pract   | Lab<br>pract |        | ammation                 | ing the subject                                                                          | Examination Requirement (ER)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Compulsory Sub</b> | jects:                                                  |      | r       | T            | T      | 1                        |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| GYTKKAM255            | Pharmacodynamics 3                                      | 3    |         |              | 4      | Comprehen-<br>sive exam  | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Biophar-<br>macy               | GYTKKAM253 - Pharmacodynamics 2 (lect)<br>GYTKKAM256 - Pharmacodynamics 3 (pract) (ER)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| GYTKKAM256            | Pharmacodynamics 3                                      |      | 3       |              | 2      | Term Mark                | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Biophar-<br>macy               | GYTKKAM253 - Pharmacodynamics 2 (lect)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| GYTKKAM321            | Veterinary Pharmacy                                     | 2    |         |              | 2      | Exam                     | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Biophar-<br>macy               | GYTKKAM253 - Pharmacodynamics 2 (lect)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| GYTKKAM331            | Basic Clinical Disciplines and Clinical<br>Drug Therapy | 3    |         |              | 3      | Exam                     | Faculty of Pharmacy, Institute of<br>Clinical Pharmacy                                   | GYTKKAM153 - Physiology 2 (lect)<br>GYTKKAM193 - Pathophysiology 2 (lect)<br>GYTKKAM253 - Pharmacodynamics 2 (lect)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| GYTKKAM341            | Clinical Pharmacy 1                                     | 2    |         |              | 2      | Exam                     | Faculty of Pharmacy, Institute of<br>Clinical Pharmacy                                   | GYTKKAM253 - Pharmacodynamics 2 (lect)<br>GYTKKAM271 - Public Health and Preventive Med-<br>icine (lect)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| GYTKKAM352            | Pharmaceutical Care 2                                   |      | 3       |              | 2      | Term Mark                | Faculty of Pharmacy, Institute of<br>Clinical Pharmacy                                   | GYTKKAM351 - Pharmaceutical Care 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| GYTKKAM371            | Natural Treatments and Complemen-<br>tary Medicine      | 2    |         |              | 2      | Exam                     | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Biophar-<br>macy               | GYTKKAM183 - Pharmacognosy 2 (lect)<br>GYTKKAM253 - Pharmacodynamics 2 (lect)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| GYTKKAM521            | Pharmacy Internship 1                                   |      | 40      |              | 8      | Term Mark                | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM031 - Informatics (pract)<br>GYTKKAM044 - Physics-Biophysics (pract)<br>GYTKKAM105 - Quantitative Chemical Analysis -<br>Calculation (sem)<br>GYTKKAM184 - Pharmacognosy 2 (pract)<br>GYTKKAM194 - Pathophysiology 2 (pract)<br>GYTKKAM202 - Microbiology and Immunology<br>(pract)<br>GYTKKAM228 - Pharmaceutical Technology 4<br>(lect)<br>GYTKKAM253 - Pharmacodynamics 2 (lect)<br>GYTKKAM261 - Pharmaceutical Analysis (lect)<br>GYTKKAM281 - Ethics in Pharmacy (lect)<br>GYTKKAM311 - Drug Regulatory Affairs 2 (lect)<br>GYTKKAM351 - Pharmaceutical Care 1 (pract)<br>GYTKKAM411 - Biotechnology (lect)<br>GYTKKAM461 - Phythotherapy (lect) |

|                          |                                                   |   |    |   |    |            |                                                                                          | GYTKKAM481 - Clinical Laboratory Investigations<br>(lect)<br>GYTKKAM511 - Professional Internship 1<br>GYTKKAM512 - Professional Internship 2<br>GYTKKAM531 - First Aid and Resuscitation (lect)<br>GYTKKAM531 - First Aid and Resuscitation (pract)<br>GYTKKAM541 - Biostatistics (lect)<br>GYTKKAM542 - Biostatistics (pract)<br>GYTKKAM981 - Latin language (pract)<br>GYTKKAM991 - Pharmacy Administration (pract)<br>GYTKKAM1221 - Preparation of Diploma Work 2<br>(pract) |
|--------------------------|---------------------------------------------------|---|----|---|----|------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GYTKKAM1231              | Preparation of Diploma Work 3                     |   | 2  |   | 4  | Term Mark  | Institutes of the Faculty of Phar-<br>macy                                               | GYTKKAM1221 - Preparation of Diploma Work 2 (pract)                                                                                                                                                                                                                                                                                                                                                                                                                              |
| IN TOTAL                 |                                                   |   | 20 |   | 29 |            |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Compulsory Elec</b>   | tive Subjects:                                    |   | F  | I | r  | T          | 1                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| GYTKKAM421               | Quality Assurance                                 | 3 |    |   | 3  | Exam       | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM228 - Pharmaceutical Technology 4<br>(lect)                                                                                                                                                                                                                                                                                                                                                                                                                               |
| GYTKKAM471               | Clinical Pharmacy 2 Ward pharmacy                 | 2 |    |   | 2  | Exam       | Faculty of Pharmacy, Institute of<br>Clinical Pharmacy                                   | GYTKKAM241 - Biopharmacy<br>GYTKKAM253 - Pharmacodynamics 2 (lect)<br>GYTKKAM271 - Public Health and Preventive Med-<br>icine (lect)                                                                                                                                                                                                                                                                                                                                             |
| GYTKKAM482               | Clinical Laboratory Practice                      |   | 1  |   | 2  | Term Mark  | Faculty of Pharmacy, Institute of<br>Pharmacodynamics and Biophar-<br>macy               | GYTKKAM481 - Clinical Laboratory Investigations<br>(lect)                                                                                                                                                                                                                                                                                                                                                                                                                        |
| GYTKKAM1331              | Evidence-Based Prevention and<br>Health Promotion | 2 |    |   | 2  | Exam       | Albert Szent-Györgyi Medical<br>School, Department of Public<br>Health                   | GYTKKAM271 - Public Health and Preventive Med-<br>icine (lect)                                                                                                                                                                                                                                                                                                                                                                                                                   |
| GYTKKAM1341              | Biopharmaceuticals                                | 2 |    |   | 2  | Exam       | Faculty of Pharmacy, Institute of Pharmaceutical Analysis                                | GYTKKAM071 - Pharmaceutical Biology (lect)<br>GYTKKAM171 - Biochemistry (lect)                                                                                                                                                                                                                                                                                                                                                                                                   |
| GYTKKAM1351              | Pharmaceutical Psychology and Com-<br>munication  | 2 |    |   | 2  | Exam       | Faculty of Pharmacy, Institute of<br>Pharmaceutical Technology and<br>Regulatory Affairs | GYTKKAM253 - Pharmacodynamics 2 (lect)<br>GYTKKAM512 - Professional Internship 2 (pract)                                                                                                                                                                                                                                                                                                                                                                                         |
| IN TOTAL                 |                                                   |   |    |   | 10 |            |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Elective subjects</b> |                                                   |   | -  | • | •  |            |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                          | Elective subject 8                                |   |    |   | 2  | Evaluation |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

\* The number of hours varies depending on the chosen courses.

| Year V, semester l                 | I                                |            |       |                           |             |                                                |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------|----------------------------------|------------|-------|---------------------------|-------------|------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Course Code                        | Course name                      | Hours/week |       |                           | Credit      | Form of ex-                                    | Institute responsible for                                                                | Precondition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                    |                                  | Lect       | Pract | Labora-<br>tory<br>pract. | - Credit    | amination                                      | teaching the subject                                                                     | parallel completion (P) or<br>examination requirement (ER)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| GYTKKAM522                         | Pharmacy Internship 2            |            | 40    |                           | 16          | Term Mark                                      | Faculty of Pharmacy, Institute<br>of Pharmaceutical Technology<br>and Regulatory Affairs | GYTKKAM255 - Pharmacodynamics 3 (lect)<br>GYTKKAM321 - Veterinary Pharmacy<br>GYTKKAM331 - Basic Clinical Disciplines and Clinical<br>Drug Therapy<br>GYTKKAM341 - Clinical Pharmacy 1 (lect)<br>GYTKKAM352 - Pharmaceutical Care 2 (pract)<br>GYTKKAM371 - Natural Treatments and Comple-<br>mentary Medicine (lect)<br>GYTKKAM511 - Professional Internship 1<br>GYTKKAM512 - Professional Internship 2<br>GYTKKAM521 - Pharmacy Internship 1<br>GYTKKAM1231 - Preparation of Diploma Work 3<br>(pract)<br>as well as collecting required credit points for com-<br>pulsory elective and elective subjects by the end of<br>the 9th semester. |
| IN TOTAL                           |                                  |            |       |                           | 16          |                                                |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Elective subjects (<br>Course Code | Course name                      | Hours/week |       | Credit F                  | Form of ex- | Institute responsible for teaching the subject |                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                    |                                  | Lect       | Pract | Lab<br>pract              | creuit      | amination                                      | institute responsible for teaching the subject                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| GYTKKAM621                         | Humangenetics                    | 2          |       |                           | 2           | Exam                                           | Albert Szent-Györgyi Medical School, Department of Medical Genetics                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| GYTKKAM641                         | Bioinorganic Chemistry           | 2          |       |                           | 2           | Evaluation                                     | Faculty of Pharmacy, Institute of Pharmaceutical Analysis                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| GYTKKAM781                         | Computer Literature              | 1          |       |                           | 2           | Evaluation                                     | Faculty of Pharmacy, Institute of Pharmaceutical Chemistry                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| GYTKKAM891                         | Radiochemistry                   | 2          |       |                           | 2           | Evaluation                                     | Faculty of Pharmacy, Institute of Pharmaceutical Analysis                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| GYTKKAM901                         | General Laws in Chemistry        | 2          |       |                           | 2           | Evaluation                                     | Faculty of Pharmacy, Institute of Pharmaceutical Analysis                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| GYTKKAM1241                        | Frontiers of Molecular Biology 1 | 2          |       |                           | 2           | Evaluation                                     | Albert Szent-Györgyi Medical Scho                                                        | ool, Department of Medical Biology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| GYTKKAM1242                        | Frontiers of Molecular Biology 2 | 2          |       |                           | 2           | Evaluation                                     | Albert Szent-Györgyi Medical Scho                                                        | ool, Department of Medical Biology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Elective subjects (7th to 9th semesters): |             |            |       |              |        |             |                                                 |  |
|-------------------------------------------|-------------|------------|-------|--------------|--------|-------------|-------------------------------------------------|--|
| Course Code                               | Course name | Hours/week |       |              | Credit | Form of ex- | Institute regroupsible for teaching the subject |  |
|                                           |             | Lect       | Pract | Lab<br>pract | Credit | amination   | Institute responsible for teaching the subject  |  |
|                                           |             |            |       |              |        |             |                                                 |  |
| Elective subject (9th semester):          |             |            |       |              |        |             |                                                 |  |
|                                           |             |            |       |              |        |             |                                                 |  |

## **THESIS AND BOARD EXAM**

The Board examination verifies and evaluates the knowledge, skills and abilities required to obtain the diploma, during which the student must also prove that he can apply the knowledge he has learned. As the curriculum specifies, the final state board examination consists of writing and defending a thesis, passing a complex written test, and practical (prescription pharmacy) and oral examinations.

#### **ASPECTS OF THE PREPARATION OF THE THESIS**

The student works on a topic recommended by the institution or – in some cases – chosen by himself and approved by the relevant department.

### Thesis topic selection date:

September-October in every academic year.

#### Deadline for the submission of the thesis: September 15, 2023 and March 11, 2024

#### **Ideal margins:**

Top3.2 cm (if the page number is on the top)Bottom:2.0-2.5 cmLeft:2.8-3.2 cm (document binding)Right:2.0-2.5 cmIdeal font and font size:Arial, Calibri, Times New Roman, 11-12 points

The **thesis aims** to gain more profound, more detailed, research-level knowledge in a subject area than the taught material and help develop the skills necessary for independent scientific work. The candidate's task is to get to know and master the methods used in the given research area (experimental work), to carry out extensive, general and systematic literature work on a topic (literary work), and to gain publishing experience. In the public defence of the thesis, the candidate proves that he has acquired the above knowledge with his presentation and debate skills.

In the case of theses, it is recommended to choose experimental work if possible. However, literary work is also accepted due to the cubature and financial limitations of the host institutes.

Thesis can be prepared in any subject taken by the students, in all Institutes that train pharmacy students, or at other research sites approved by the Dean. The thesis supervisor can be a lecturer appointed by the Head of the Institute. The dean of the Faculty of Pharmacy may permit deviations from this. The *experimental thesis* usually contains the following chapters (the order and title of the chapters can be changed according to the customs of the given subject area):

**Introduction, aims** (brief description of the topic or the problem and definition of goals)

**Literature overview** (a synthetic description of the background of the theme or subtheme based on original publications)

**Materials and Methods**(description of applied experimental methods, specific experiments)

Results and Discussion (discussion of the results and conclusions)

**Summary** (concise, factual description of the results achieved)

**Bibliography** (listing of the literature used) The literature specification should be consistent and comply with the customs accepted and applied in the given subject area.

A *literary thesis* is an independent processing of a topic, primarily based on original publications.

The **literary work** usually contains the following chapters:

**Introduction** (brief description of the topic or the task, definition of the literature survey method)

**Overview of the literature data** (this is the main chapter of the thesis). This chapter contains the organising and synthetic processing of the original papers published. It is advisable to divide the topic into subsections according to the nature of the topic. **Summary** (concise description of the presented results, concluding)

**Bibliography** (listing of the literature used) The literature specification should be consistent and comply with the customs accepted and applied in the given subject area.

The thesis must be uploaded electronically in Modulo only in PDF format. The timetable of the thesis and the English-Hungarian summary must be submitted in original copies, as well as the declaration of the authenticity of the thesis in one original copy and as an attachment to the thesis, also in PDF format, to the Registrar's Office.

The inside title page should include the author's name, the thesis's designation, the thesis, the title of the thesis, the name of the institute where the dissertation was prepared and the year of preparation. The length of the thesis should be 25–60 A/4 size printed pages (26–30 lines/page, depending on the font and size). The style of the thesis should be fluid, and its wording should be clear and linguistically correct. The text must comply with valid scientific spelling rules. Individual chapters of the thesis should be proportional according to the nature of the topic.

#### **BOARD EXAM**

After obtaining the absulotory, the candidates for doctor of pharmacy will take a written (test of general pharmaceutical knowledge), oral (knowledge of drug supply – management of situations occurring in practice) and practical exam (medicine preparation tasks).

The theoretical part of the pharmacy final exam is based on processing a practical problem that may occur in a public or hospital pharmacy practice. The candidates draw out a short description of a situation as an item, and the task is to solve the raised problem, which is usually multi-directional and detailed information for the patient presenting the situation. The information primarily concerns the correct use of medicines. However, the answer must include the theoretical foundations on which the information provided is based, which should not be explained to a lay patient in a real situation. Each of the three topics is available to the candidates, and they cover all the knowledge necessary to pass the exam. Each of the three topics is available to the candidates, and they cover all the knowledge necessary to pass the exam.

The pharmacological and therapeutic characterisation of a pharmacological group is part of the solution to every situation that includes the definition and division of the given group and the description of its representatives used in therapy (indications, contraindications, side effects, interactions, most important chemical properties, structure-effect relationships). It is essential to refer to the non-pharmacological treatment options of the symptom that represent the indication or lifestyle actions that can be recommended for drug therapy. It is advisable to recommend over-the-counter or medicinal products containing herbs where justified.

Pharmaceutical technology parts of the situations can be the pharmaceutical forms relevant to the given patient, in which case the description should cover their production, most important properties and stability. It is also expected to touch on the technological and biopharmaceutical aspects that determine the use of the preparations that arise (e.g., the ability to divide tablets).

The situations must be resolved within the scope defined by the applicable norms and rules, as in pharmacy practice, for which knowledge of them is essential. These rules affect the entire pharmaceutical activity (the pharmacy, the medicine, and the patient). Every situation contains some aspect of professional administration; demonstrating awareness of these is also part of the final exam.

The committee evaluates the knowledge material for each subject with a separate partial mark. However, the undisclosed purpose of the final exam based on a practical situation is to judge how well the candidates can apply the knowledge acquired at the Faculty and how well they integrate the knowledge material assigned to each subject in a real-life situation.

## DOCTORAL SCHOOL OF PHARMACEUTICAL SCIENCES

Chair: JUDIT HOHMANN PHD, DSC

Vice-chair: ZSOLT SZAKONYI PHD, DSC

### **Academic Programs**

- **1. PHARMACOGNOSY** Program director: Judit Hohmann PhD, DSc
- **2. PHARMACEUTICAL ANALYSIS** Program Director: **István Ilisz PhD, DSc**
- **3. PHARMACODYNAMICS, BIOPHARMACY, CLINICAL PHARMACY** Program Director: **István Zupkó PhD, DSc**
- **4. PHARMACEUTICAL CHEMISTRY, PHARMACEUTICAL RESEARCH** Program Director: **István Szatmári PhD, DSc**
- **5. PHARMACEUTICAL TECHNOLOGY AND REGULATORY STUDIES** Program Director: **Ildikó Csóka PhD**

Compiled by SZTE GYTK Registrar's Office

Manuscript closed: October 31, 2023