1. Personal Information

Name and Surname: Tuğba Erçetin

Academic Title: Assistant Professor Doctor

State of Education: PhD

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2. Education and Qualifications

Degree	Department	University	Year
Undergraduate	Biology	Ankara University	**2000-2004**
Master of Science	Biology	Ankara University	**2004-2007**
PhD	Biotechnology	Ankara University	**2007-2013**

3. Publications

3.1. International Peer-reviewed Journal Articles (SCI, SCI-Exp, ESCI)

3.1.1. Orhan I, Senol Deniz FS, Koca U**, Ercetin T**, Toker G. Evaluation of antioxidant and acetylcholinesterase inhibitory activities of *Arnebia densiflora* Ledeb. Turkish Journal of Biology. 2011;35(1):111-5.

3.1.2. Ercetin T, Toker G, Kartal M, Cölgecen H, Toker MC. Analysis of some isoflavones in natural tetraploid *Trifolium pratense* L. (red clover) calluses. Brazilian Journal of Pharmacognosy. 2012;22(5):964-70.

3.1.3. Ercetin T, , Deniz FSS, Orhan I, Toker G. Comparative assessment of antioxidant and cholinesterase inhibitory properties of the marigold extracts from *Calendula arvensis* L. and *Calendula officinalis* L. Industrial Crops and Products. 2012 Mar;36(1):203-8.

3.1.4. Orhan I, Deniz FSS, **Ercetin T**, Kahraman A, Celep F, Akaydin G, Sener B, Dogan M. Assessment of anticholinesterase and antioxidant properties of selected sage (Salvia) species with their total phenol and flavonoid contents. Industrial Crops and Products. 2013 Jan; 41:21-30.

3.1.5. Gulcan HO, Unlu S, Esiringu I, **Ercetin T**, Sahin Y, Oz D, and Sahin MF. "Design, synthesis and biological evaluation of novel 6H-benzo [c] chromen-6-one, and 7, 8, 9, 10-tetrahydro-benzo [c] chromen-6-one derivatives as potential cholinesterase inhibitors. "Bioorganic & Medicinal Chemistry. 2014;22(19):5141-5154.

3.1.6. Gulcan HO, Unlu S, Dimoglo A, Şahin Y, Esiringu I, **Erçetin T**, Öz D, and Şahin MF. "Marginally Designed New Profen Analogues Have the Potential to Inhibit Cyclooxygenase Enzymes." Archiv der Pharmazie. 2015; 348(1):55-61.

3.1.7. Gurdal EE, Turgutalp B, Gulcan HO, **Erçetin T**, Sahin MF, Durmaz I, Atalay RC, Nguyen QD, Sippl W, Yarim M. Synthesis of Novel Benzothiazole-Piperazine Derivatives and Their Biological Evaluation as Acetylcholinesterase Inhibitors and Cytotoxic Agents. Anticancer Agents Med Chem. (Formerly Current Medicinal Chemistry-Anti-Cancer Agents), 2017; 17(13), 1837-1845.

3.1.8. Fallah, A., Gülcan, H. O., Gülcan, C., **Erçetin, T.**, Kabaran, S., Kunter, İ. & Şahin, M. F. Traditional Techniques Applied in Olive Oil Production Results in Lower Quality Products in Northern Cyprus. Turk J Pharm Sci 2018;15(2):190-199.

3.1.9. Norouzbahari, M., Burgaz, E. V., **Ercetin, T.**, Fallah, A., Foroumadi, A., Firoozpour, L., & Gulcan, H. O. Design, synthesis and characterization of novel urolithin derivatives as cholinesterase inhibitor agents. Letters in Drug Design & Discovery, 2018; 15(11), 1131-1140.

3.1.10. Kilic, B., Gulcan, H.O., Aksakal, F., **Ercetin, T**., Oruklu, N., Bagriacik, E.U. and Dogruer, D.S., 2018. Design and synthesis of some new carboxamide and propanamide derivatives bearing phenylpyridazine as a core ring and the investigation of their inhibitory potential on in-vitro acetylcholinesterase and butyrylcholinesterase. Bioorganic Chemistry, 79, pp.235-249.

3.1.11. Akbora, H. D., Kunter, İ., **Erçetin, T**., Elagöz, A. M., & Çiçek, B. A. (2020). Determination of tetrodotoxin (TTX) levels in various tissues of the silver cheeked puffer fish (Lagocephalus sceleratus (Gmelin, 1789)) in Northern Cyprus Sea (Eastern Mediterranean). Toxicon, 175, 1-6.

3.1.12. Noshadi, B., **Ercetin, T.**, Luise, C., Yuksel, M. Y., Sippl, W., Sahin, M. F., Gazi, M. & Gulcan, H. O. (2020). Synthesis, Characterization, Molecular Docking, and Biological Activities of Some Natural and Synthetic Urolithin Analogs. Chemistry & Biodiversity, 17(8), e2000197.

3.1.13. Ozyazici, T., Gurdal, E. E., Orak, D., Sipahi, H., **Ercetin, T.**, Gulcan, H. O., & Koksal, M. (2020). Synthesis, anti-inflammatory activity, and molecular docking studies of some novel Mannich bases of the 1, 3, 4-oxadiazole-2 (3H)-thione scaffold. Archiv der Pharmazie, e2000061.

3.1.14. Erdogan, M., Kilic, B., Sagkan, R. I., Aksakal, F., **Ercetin, T**., Gulcan, H. O., & Dogruer, D. S. (2021). Design, synthesis and biological evaluation of new benzoxazolone/benzothiazolone derivatives as multi-target agents against Alzheimer's disease. European Journal of Medicinal Chemistry, *212*, 113124.

3.1.15. Shukur, K. T., **Ercetin, T.**, Luise, C., Sippl, W., Sirkecioglu, O., Ulgen, M., Coskun, G. P., Yarim, M., Gazi, M., and Gulcan, H. O. (2021). Design, synthesis, and biological evaluation of new urolithin amides as multitarget agents against Alzheimer's disease. Archiv der Pharmazie, e2000467.

3.1.16. Işık, A., Acar Çevik, U., Karayel, A., Celik, I**., Erçetin, T**., Koçak, A., Özkay, Y. and Kaplancıklı, Z.A. Synthesis and molecular modelling of thiadizole based hydrazone derivatives as acetylcholinesterase and butyrylcholinesterase inhibitory activities. SAR and QSAR in Environmental Research, 2022; 33(3), pp.193-214.

3.1.17. Ercetin, T., Safaei, M. and Gulcan, HO. Investigation of total phenolic and flavonoid content of *Salvia willeana* (Holmboe) Hedge, an endemic plant of Cyprus, and screening of its antioxidant and cholinesterase inhibitory properties. Journal of Research in Pharmacy, 2022; 26(2) 263-71.

3.1.18. Işık, A., Çevik, U. A., Celik, I., **Erçetin, T.**, Koçak, A., Özkay, Y., & Kaplancıklı, Z. A. (2022). Synthesis, characterization, molecular docking, dynamics simulations, and in silico absorption, distribution, metabolism, and excretion (ADME) studies of new thiazolylhydrazone derivatives as butyrylcholinesterase inhibitors. Zeitschrift für Naturforschung C.

3.1.19. Turgutalp, B., Bhattarai, P., **Ercetin, T.**, Luise, C., Reis, R., Gurdal, E.E., Isaak, A., Biriken, D., Dinter, E., Sipahi, H. and Schepmann, D., ... & Yarim, M. Discovery of potent cholinesterase inhibition-based multi-target-directed lead compounds for synaptoprotection in Alzheimer's disease. Journal of Medicinal Chemistry, 2022; 65(18), 12292-12318.

3.1.20. Kunter, I., Tarabishi, M., Zabib, N., **Ercetin, T**., Ilktac, M., Goger, F. and Kosar, M., 2023. New Data for Endemic *Phlomis cypria* Post from North Cyprus: Biological Activities and LC MS/MS Analysis. Indian Journal of Pharmaceutical Education and Research, 57(2).

3.1.21. Karakaya, A., Çevik, U. A., **Erçetin, T**., Özkay, Y., & Kaplancıklı, Z. A. (2023). Synthesis of Imidazole-Thiazole Derivatives as Acetylcholinesterase and Butyrylcholinesterase Inhibitory Activities. Pharmaceutical Chemistry Journal, 1-5.

3.2. National Peer-reviewed Journal Articles

3.2.1. Koca U, Cölgecen H**, Ercetin T**, Toker G. *In vitro* seed germination and callus production from *Ecballium elaterium* Rich. as a source for cucurbitacin B. Biomed. 2009;4 (4):350-9.

3.2.2. Işık A, Çevik UA, **Ercetin T**, and Koçak A. "Yeni Tiyazolil-Hidrazin Türevlerinin Sentezi ve Asetilkolinesteraz (AChE) ve Bütirilkolinesteraz (BuChE) Aktivite Çalışmaları." Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi 9, no. 1: 277-285.

3.2.3. Karakaya, A., Maryam, Z., **Ercetin, T**., & Çevik, U. A. (2023). Synthesis of thiazole derivatives as cholinesterase inhibitors with antioxidant activity. European Journal of Life Sciences, 2(3), 118-124.

3.2.4. Çevik, UA., & **Ercetin, T.** (2023). Design, Synthesis and Evaluation of Pyrrol-thiazole Derivatives as AChE and BuChE Inhibitory and Antioxidant Activities. Cumhuriyet Science Journal, 44(4), 625-628.

3.3. Articles published in other internationally refereed journals

3.3.1. Sanajou, S., Nourhashemi, S., Fallah, A., **Ercetin, T.**, Sahin, M. F., & Gulcan, H. O. (2018). The Investigation of the Interaction of Several Antipsychotic Drugs with Human Cholinesterase Enzymes. EMU Journal of Pharmaceutical Sciences, 1(1), 1-5.

3.3.2. Mavideniz, A, Fallah A, Koshravi F, Ahdno F, Arter M, **Ercetin T**, Sahin MF, and Gulcan HO. "Screening The Cholinesterase Inhibitory Potential Of Some (1E, 4E)-1, 5-Diphenylpenta-1, 4dien-3-One Derivatives." EMU Journal of Pharmaceutical Sciences 2, No. 1 (2019): 7-12.

3.3.3. Noshadi, B., **Ercetin, T**., Mavideniz, A., & Gulcan, H. O. Investigation of cholinesterase inhibitory potential of chlorinated phenols. EMU Journal of Pharmaceutical Sciences, 3(1), (2019). 29-34.

3.3.4. **Ercetin T.**, Mavideniz A, Shukur KT, Khosravi A, Bahamehr R, Salamati F, Shahinfar H, Najjaran, M., Ahmed, M.I., Maher, N. and Khajeh, N. et al. "The effects of some organic solvents on the modified Ellman procedure for the assay of cholinesterases." EMU Journal of Pharmaceutical Sciences 3, No: 3 (2020): 153-158.

3.3.5. Kheirkhahan K., **Ercetin T.**. Usage of the medicinal plants in skincare, The International Pharmaceutical Students' Federation (IPSF) Phytotherapy in modern healthcare booklet 2022, The Best Entries, p: 11-18. 2022.

3.3.6. Harati K, Kiaei SM, Amjad TM, Nobavar Z, Shukur KT, Mavideniz A, **Ercetin T.**, Gulcan HO. Synthesis and cholinesterase inhibitory potential of 2-phenoxy-N-substituted-acetamide derivatives. EMU Journal of Pharmaceutical Sciences vol.6, No.1 (2023): 27-33.

3.4. Assertions presented in international scientific congresses and published in the proceedings

3.4.1. Koca U., **Erçetin T.**, Toker G. Production and Increase of Cucurbitacin B in *Ecballium elaterium* (L) Rich. Cell Suspension Culture by Using Elicitors PSE Congress Plants for Human Health in the Post- Genome Era, 26-29 August 2007, Helsinki/Finland. **Poster** Announcement.

3.4.2. Koca U., **Erçetin T.**. Effects of Different Media Compositions on the Production of Shikonin Derivatives in Callus Cultures of *Arnebia densiflora* Ledeb. 5th Conference on Medicinal and Aromatic Plants of Southeast European Countries, 02-05 September 2008, Brno/ Czech Republic. **Poster** Announcement.

3.4.3. Koca U., Bardakçı H., Kırmızıbekmez H., **Erçetin T.**, Toker G., Toker M. C., Yeşilada E. Identification of Shikonin Derivatives and Rosmarinic acid in *Arnebia densiflora* (Nordm.) Ledeb. Plant and Callus Cultures, 9th International Symposium on Pharmaceutical Sciences, 23-26 June 2009, Ankara/Turkey. **Poster** Announcement.

3.4.4. **Erçetin T.**, Şenol Deniz F.S., Orhan I., Celep F., Kahraman A., Akaydın G., Şener B., Doğan M. Anticholinesterase and Antioxidant Appraisal of Some *Salvia* Species from Euro-Sibirian and Mediterranean Phytogeographic Regions, 6th Conference on Medicinal and Aromatic Plants of Southeast European Countries (CMAPSEEC), 18- 22 April 2010, Antalya/Turkey. **Poster** Announcement.

3.4.5. Şenol Deniz F.S., **Erçetin T.**, Orhan I., Celep F., Kahraman A., Akaydın G., Şener B., Doğan M. Assessment of Anticholinesterase and Antioxidant Effects of Some *Salvia* Species from Irano-Turanian Phytogeographic Region, 6th Conference on Medicinal and Aromatic Plants of Southeast European Countries (CMAPSEEC), 18- 22 April 2010, Antalya/Turkey. **Poster** Announcement

3.4.6. Sezerel C, **Ercetin T**. Folkloric Medicinal Plants in North Cyprus. 3rd Mediterranean Symposium on Medicinal and Aromatic Plants (MESMAP-3), 13-16 April 2017, Kyrenia/ Turkish Republic of Northern Cyprus. **Poster** Announcement.

3.4.7. Norouzbahari, M., Burgaz, E. V., **Ercetin, T.**, Fallah, A., Şahin, M. F., Gazi M. and Gulcan, H.O. Questioning the N-Benzyl group within the Aryl-Spacer-N-Benzyl pharmacophore employed for the design of cholinesterase inhibitor agents. Uluslararası Katılımlı 6. İlaç Kimyası: İlaç Etkin Maddesi Tasarımı, Sentezi, Üretimi ve Standardizasyonu Kongresi, 22-25 Mart 2018, Antalya/Turkey. **Poster** Announcement.

3.4.8. Noshadi B., **Ercetin, T**., Gazi M. and Gulcan, H.O. The investigation of the interaction of urolithins with cyclooxygenase enzymes. EBAT (1st Eurasia Biochemical Approaches & Technologies) K Congress. 27-30 Ekim 2018, Antalya/Turkey. **Poster** Announcement

3.4.9. Sakallı EA, **Erçetin T**, Koşar M. Determination of Anticholinesterase inhibitory activity of *Arum rupicola* Boiss. var. *rupicola*. World Congress on Medicinal and Aromatic Plants (WOCMAP 2019), 13-17 November 2019 in N.Cyprus. **Poster** Announcement.

3.4.10. Erçetin T. Pharmacognostical studies on *Onosma caespitosum* which is an endemic plant of Cyprus. 5th International GAP Mathematics-Engineering-Science and Health Sciences Congress December 4-6,2020, Sanliurfa/Turkey. **Oral** Presentation.

3.4.11. Erçetin T and Olukoya TU**.** Antimalarial activities of medicinal plants in Eastern Mediterranean Region.International Symposium of Scientific Research and Innovative Studies. 22-25 February 2021, Çanakkale/Turkey. **Oral** Presentation.

3.4.12. Işık A., Acar Çevik U., **Erçetin T.** Design, Synthesis and In Vitro Studies of Novel Thiazole Derivatives with Acetylcholinesterase (AChE) and Butyrylcholinesterase (BuChE) Inhibitory Activity. International Health Areas Congress 2021 (IHAC'21) (Uluslararası Sağlık Alanları Kongresi 2021-(USAK'21)), 18-19 September 2021. **Oral** Presentation.

3.4.13. Işık A., Acar Çevik U., **Erçetin T**. Synthesis of Various Thiazole-Hydrazinyl Derivatives, Evaluation of Inhibitory Effects on Acetylcholinesterase (AChE) and Butyrylcholinesterase (BuChE) Enzymes, International Congress on Scientific Advances-ICONSAD 21/22-25 December 2021. **Oral** Presentation.

3.4.14. Işık A., Acar Çevik U., **Erçetin T**. Synthesis, Structure Elucidation and Investigation of Biological Activity of Some New Pyrazoline-Thiazole Derivatives which are Expected to Effect in the Treatment of Alzheimer's Disease. 8th International Medicine and Health Sciences Researches Congres. 25- 26 December 2021. Ankara, Online. **Oral** Presentation.

3.5. Assertions presented in national scientific congresses and published in the proceedings

3.5.1 Ercetin T., Colgecen H., Kartal M., Toker M.C., Toker G. Research of Isoflavone Contents in Natural Tetraploid *Trifolium pratense* L. (Red clover) Calluses, 17th Herbal Pharmaceutical Raw Materials Meeting (BIHAT-2007), 26-29 Ekim 2007, Kuşadası/Turkey. **Oral** Presentation.

3.5.2 Koca U., **Ercetin T.**, Colgecen H., Kartal M., Kan Y., Toker M.C.. Comparison of Cultivation on aseptic media *Echinacea purpurea* and *Echinacea pallida* shoots formation of callus potential. 18th Herbal Pharmaceutical Raw Materials Meeting, (BIHAT-2008), 16-18 October 2008, Istanbul/ Turkey. **Poster** Announcement.

3.5.3 Koca U., **Ercetin T.**, Toker G., Toker M.C.. Effects of different media compositions on the production of naphtoquinone in callus cultures of *Arnebia densiflora* Ledeb. 18th Herbal Pharmaceutical Raw Materials Meeting, (BIHAT-2008), **Poster** Bildirisi, 16-18 October 2008, Istanbul/ Turkey. **Poster** Announcement.

3.5.4 **Ercetin T.**, Çölgeçen H., Toker M.C., Toker G.. Formation of the callus of *Arnebia densiflora* Ledeb. Plants in improving the use of different sterilization methods. 19th Herbal Pharmaceutical Raw Materials Meeting (BIHAT-2010), 27-30 October 2010, Mersin/ Turkey. **Poster** Announcement.

3.5.5 Çeçen T., **Ercetin T.**, Toker G.. Researches on *Calendula officinalis* L. Flowers, Some Plant Samples Sold in Markets and the Commercial Preparations. 20th Herbal Pharmaceutical Raw Materials Meeting (BIHAT-2012), 10-13 October 2012, Antalya / Turkey. **Poster** Announcement.

3.5.5. Ercetin T., Toker G., Toker MC.. Production and Analysis of Shikonin and Derivatives with Callus Culture in *Arnebia densiflora* Ledeb. 21st Herbal Pharmaceutical Raw Materials Meeting (BIHAT-2014), 28 May-01 June 2014, Ürgüp, Nevşehir / Turkey. **Oral** Presentation.

3.5.6. Kheirkhahan P, **Ercetin T**. Usage of medicinal plants for haircare products. 24th Herbal Pharmaceutical Raw Materials Meeting (BIHAT-2022), 23 -26 June 2022, Ankara / Turkey. **Poster** Announcement.

3.5.7. Erçetin T., Alinazari R. Comparison between antioxidant activity of *Cynara scolymus* L. (enginar) grown in Turkey and TRNC. 24th Herbal Pharmaceutical Raw Materials Meeting (BIHAT-2022), 23 -26 June 2022, Ankara/ Turkey. **Poster** Announcement.

3.6. International books published, or chapters from a book

3.6.1. Pharmaceutical Biotechnology. Highlights in Pharmacy. Editors: Şahin MF, Koşar M, Şahin G, Çelik G, Özhatay N. Eastern Mediterranean University Press 2018, North Cyprus, March 2018, 131-143. ISBN: 978-605-9595-15-5.

3.7. International patents

3.7.1. Gulcan HO, Serdar Unlu, Ilker Esiringu, Yasemin Sahin, **Tugba Ercetin**, Demet Oz and Mustafa Fethi Sahin. 3-substituted-6h-benzo[c]chromen-6-ones and 3-substituted-7,8,9,10-tetrahydro-6h-benzo[c]chromen-6-one's against senile dementia. EP Patent No 2958906A1. European Patent Office. International publication number: **WO 2014/129990 A1.**

3.7.2. Gulcan HO, Unlu S, Esiringu I, Sahin Y, **Ercetin T**, Oz D, Sahin F. 1-(dimethylamino)ethyl-substituted 6h-benzo[c]chromen-6-ones against senile dementia. US20160002194A1**.** US Patent, 2017. **EP2922834A1**, EP2922834B1, US9586925, U.S. Patent No. 9,586,925. Washington, DC: U.S. Patent and Trademark Office.

3.8. National patents

3.8.1 Sahin, F., Esiringü, I., Gulcan HO., Şahin, Y., Ünlü, S., **Ercetin T**. (2016). l-(Dimetilamino)etil-substitüe-6H-benzo[c]kromen-6-on. EP2922834B1, TR 2016/13006, Turkish Patent and Trademark Office.

3.8.2 Gulcan H.O., Serdar, U., Esiringu, I., Sahin, M.F., **Ercetin T**, Demet, O. Z., & Sahin, Y. (2013). 3-sübstltüe-6H-benzo[c]kromen-6-on ve 3-sübstltüe-7,8,9,10-tetrahidro-6H-benzo[c]kromen-6-on bileşikleri. TR 2013/02068, Turkish Patent and Trademark Office.

3.8.3 Gulcan H.O, Serdar, U., Dimoglo, A., Sahin, Y, Koktürk, M., **Ercetin T.,** Demet, O., Dimoglo, N.S., Esiringü, İ. (2012). Naproksen analoğu bileşikler ve üretim yöntemi. TR 2012/13785, Turkish Patent and Trademark Office.

3.8.4 Gulcan H.O., Serdar, U., Dimoglo, A., Sahin, Y, Koktürk, M., **Ercetin T**, Demet, O., Dimoglo, N.S., Esiringü, İ. (2012). İbuprofen analoğu bileşikler ve üretim yöntemi. TR 2012/13784, Turkish Patent and Trademark Office.

3.8.5 Gulcan H.O., Serdar, U., Dimoglo, A., Sahin, Y, Koktürk, M., **Ercetin T.,** Demet, O., Dimoglo, N.S., Esiringü, İ. (2012). Flurbiprofen analoğu bileşikler ve üretim yöntemi. TR 2012/13783, Turkish Patent and Trademark Office.

3.9. Projects

3.9.1. Studies on the Production of Plant-Based Pharmaceutical Active Ingredients by Using Biotechnological Methods. The Scientific and Technological Research Council of Turkey (TUBİTAK) Research Project. (01/06/2006-01/06/2008).

3.9.2.

3.9.3. *In vitro* seed germination, Determination and Increase the amount of Cucurbitacins in Callus and Suspension Cultures Produced by Tissue Culture Methods, in *Ecballium elaterium* Rich. as a source for cucurbitacin B. Gazi University Scientific Research Project. (BAP-20) (02/2006-12/2008).

3.9.4. Design, Synthesis and Activity Research on Computer-based NSAI Drug. The Scientific and Technological Research Council of Turkey (TUBITAK) Research Project. No: 3080837, (12/2010-06/2010).

3.9.5. Design, Synthesis, and Preclinical Research on Original Molecule for Alzheimer's Disease Treatment. The Scientific and Technological Research Council of Turkey (TUBITAK) Research Project No: 3100373), (02/2011-09/2013).

3.10. Courses taught at the undergraduate and graduate levels in the last two years

Academic Year	Semester	Course Name	Weekly Course Hours		Number of Students
			Theoretical	Practical	
2021-2022	Fall	Pharmaceutical Biotechnology and Cell Culture	4	-	52
		Pharmacognosy I	3	2	56
		Thesis Project I	2	-	6
		Thesis Project II	2	-	4
		Thesis Project III	2	-	2
2021-2022	Spring	Pharmaceutical Biotechnology and Cell Culture	4	-	36
		Pharmacognosy I	3	2	27
		Thesis Project I	2	-	5
		Thesis Project II	2	-	3
		Thesis Project III	2	-	2
2021-2022	Summer	Pharmaceutical Biotechnology and Cell Culture	4	-	21

2022-2023	Fall	Pharmaceutical Biotechnology and Cell Culture	4	-	37
		Pharmacognosy I	3	2	37
		Thesis Project I	2	-	6
		Thesis Project II	2	-	5
		Thesis Project III	2	-	2
2022-2023	Spring	Pharmaceutical Biotechnology and Cell Culture	4	-	22
		Pharmacognosy I	3	2	22
		Thesis Project I	2	-	5
		Thesis Project II	2	-	7
		Thesis Project III	2	-	1
2023-2024	Fall	Pharmaceutical Biotechnology and Cell Culture	4	-	44
		Pharmacognosy I	3	2	48
		Thesis Project I	2	-	1
		Thesis Project II	2	-	5
		Thesis Project III	2	-	4

4. Memberships in Scientific and Professional Organizations

PSE - Phytochemical Society of Europe
FFD- Phytotherapy and Pharmacognosy Association
AMAPSEEC- Aromatic and Medicinal Plants of Southeast European Countries