

**PROFESSIONAL HEALTH SCIENCES MAJOR CHANGE BULLETIN NO. 2**  
**Spring 2023**

---COURSES ---

The courses listed below reflect major curricular changes for the professional health sciences and have been approved by the Catalog Subcommittee and the Professional Health Sciences Committee. The course information under the heading titled *Current* will show strikethroughs for deletions, and the heading titled *Proposed* will show underlines for additions. The column to the far right indicates the date each change becomes effective.

Subject	Course Number	New Revise Drop	Current	Proposed	Effective Date
PHARDSCI	502	Revise	<b>Integrated Pharmacology I 4</b> Integrated autonomic and central nervous system pharmacology. Typically offered Fall. <del>H, S, F grading.</del>	<b>Integrated Pharmacology I 4</b> Integrated autonomic and central nervous system pharmacology. Typically offered Fall.	8-23
PHARDSCI	504	Revise	<b>Pharmacy Calculations 1</b> ( <del>0-2</del> ) The mathematics of prescription preparation and dispensing. Typically offered Fall and Summer. <del>H, S, F grading.</del>	<b>Pharmacy Calculations 2</b> The mathematics of prescription preparation and dispensing. Typically offered Fall.	8-23
PHARDSCI	508	Revise	<b>Pharmaceutics I 3</b> Principles of dosage from design and drug delivery, with an emphasis on physiochemical principles. Typically offered Fall. <del>H, S, F grading.</del>	<b>Pharmaceutics I 3</b> Principles of dosage from design and drug delivery, with an emphasis on physiochemical principles. Typically offered Fall.	8-23
PHARDSCI	510	Revise	<b>Basic and Clinical Pharmacogenomics 2</b> Introduction to the science involving pharmacogenomics and how this knowledge is clinically applied to individualized patient therapy. Typically offered Spring. <del>H, S, F grading.</del>	<b>Basic and Clinical Pharmacogenomics 2</b> Introduction to the science involving pharmacogenomics and how this knowledge is clinically applied to individualized patient therapy. Typically offered Spring.	1-24
PHARDSCI	512	Revise	<b>Integrated Pharmacology II 4</b> Integrated hepatic, gastrointestinal, and endocrine pharmacology. Typically offered Spring. <del>H, S, F grading.</del>	<b>Integrated Pharmacology II 4</b> Integrated hepatic, gastrointestinal, and endocrine pharmacology. Typically offered Spring.	1-24
PHARDSCI	518	Revise	<b>Pharmaceutics II 2</b> Principles of dosage from design and	<b>Pharmaceutics II 2</b> Principles of dosage from design and drug	1-24

			drug delivery, with an emphasis on pharmaceutical technology and biopharmaceutics. Typically offered Spring. <del>H, S, F grading.</del>	delivery, with an emphasis on pharmaceutical technology and biopharmaceutics. Typically offered Spring.	
PHARDSCI	519	Revise	<b>Pharmaceutics Laboratory 1</b> (0-3) Laboratory experience in the preparation of medicines. Typically offered Spring. <del>S, F grading.</del>	<b>Pharmaceutics Laboratory 1</b> (0-3) Laboratory experience in the preparation of medicines. Typically offered Spring.	1-24
PHARDSCI	528	Revise	<b>Pharmacokinetics 3</b> Qualitative and quantitative understanding of the processes of drug absorption, distribution, and elimination. Typically offered Fall. <del>H, S, F grading.</del>	<b>Pharmacokinetics 3</b> Qualitative and quantitative understanding of the processes of drug absorption, distribution, and elimination. Typically offered Fall.	8-23
PHARDSCI	532	Revise	<b>Integrated Pharmacology III 4</b> Integrated cardiovascular, pulmonary, and renal pharmacology. Typically offered Fall. <del>H, S, F grading.</del>	<b>Integrated Pharmacology III 4</b> Integrated cardiovascular, pulmonary, and renal pharmacology. Typically offered Fall.	8-24
PHARDSCI	542	Revise	<b>Integrated Pharmacology IV 4</b> Integrated immuno- and anticancer pharmacology. Typically offered Spring. <del>H, S, F grading.</del>	<b>Integrated Pharmacology IV 4</b> Integrated immuno- and anticancer pharmacology. Typically offered Spring.	1-25
PHARDSCI	547	Revise	<b>Drug Development 2</b> Principles of drug design from the most initial stage of conception to the final product as a drug. Typically offered Spring. <del>H, S, F grading.</del>	<b>Drug Development 2</b> Principles of drug design from the most initial stage of conception to the final product as a drug. Typically offered Spring.	1-25
PHARMACY	501	Revise	<b>Applied Patient Care I: Patient Assessment 1</b> (0-3) Laboratory course teaching hands-on physical assessment techniques from a pharmacy perspective, to provide patient-specific care. Typically offered Spring. <del>H, S, F grading.</del>	<b>Applied Patient Care I: Patient Assessment 1</b> (0-3) Laboratory course teaching hands-on physical assessment techniques from a pharmacy perspective, to provide patient-specific care. Typically offered Spring.	1-24
PHARMACY	506	Revise	<b>Pharmacy Practice and Professional Development I 1</b> Introduction to the essential skills, attitudes, and values for practicing health care	<b>Pharmacy Practice and Professional Development I 1</b> Introduction to the essential skills, attitudes, and values for practicing health care	8-23

			professionals. Typically offered Fall. <del>S, F grading.</del>	professionals. Typically offered Fall.	
PHARMACY	507	Revise	<b>Introduction to Therapeutic Agents: Top 200 Drugs 1</b> (0-2) Drugs most frequently prescribed in the US as a basis for pharmacy practice. Typically offered Fall. <del>H, S, F grading.</del>	<b>Introduction to Therapeutic Agents: Top 200 Drugs 1</b> (0-2) Drugs most frequently prescribed in the US as a basis for pharmacy practice. Typically offered Fall.	8-23
PHARMACY	509	Revise	<b>Professional Communications Lab 1</b> (0-3) Professional communication skills as an essential foundation for career development. Typically offered Fall. <del>H, S, F grading.</del>	<b>Professional Communications Lab 1</b> (0-3) Professional communication skills as an essential foundation for career development. Typically offered Fall.	8-23
PHARMACY	513	Revise	<b>Pharmacy Practice and Professional Development II 1</b> Prepares student pharmacists for a focused 4-week Community Pharmacy Practice Experience. Typically offered Spring. <del>S, F grading.</del>	<b>Pharmacy Practice and Professional Development II 1</b> Prepares student pharmacists for a focused 4-week Community Pharmacy Practice Experience. Typically offered Spring.	1-24
PHARMACY	514	Revise	<b>Pharmacotherapy I 4</b> First in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Spring. <del>H, S, F grading.</del>	<b>Pharmacotherapy I 4</b> First in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Spring.	1-24
PHARMACY	516	Revise	<b>Health Care Systems 2</b> US healthcare system, financing of health care delivery and the role of the pharmacist. Typically offered Fall. <del>H, S, F grading.</del>	<b>Health Care Systems 2</b> US healthcare system, financing of health care delivery and the role of the pharmacist. Typically offered Fall.	8-23
PHARMACY	530	Revise	<b>Point of Care and Clinical Services 2</b> Providing point of care and clinical services in a pharmacy setting. Typically offered Fall. <del>H, S, F grading.</del>	<b>Point of Care and Clinical Services 2</b> Providing point of care and clinical services in a pharmacy setting. Typically offered Fall.	8-24
PHARMACY	531	Revise	<b>Applied Patient Care II: Clinical Assessment and Documentation 1</b> (0-3) Clinical assessment and documentation skills necessary for effective pharmaceutical	<b>Applied Patient Care II: Clinical Assessment and Documentation 1</b> (0-3) Clinical assessment and documentation skills necessary for effective	8-24

			care. Typically offered Fall. <del>H, S, F grading.</del>	pharmaceutical care. Typically offered Fall.	
PHARMACY	534	Revise	<b>Pharmacotherapy II 4</b> Second in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Fall. <del>H, S, F grading.</del>	<b>Pharmacotherapy II 4</b> Second in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Fall.	8-24
PHARMACY	536	Revise	<b>Student Success and Professional Development II 1</b> Continuing development of the essential skills, attitudes, and values for practicing health care professionals. Typically offered Fall. <del>S, F grading.</del>	<b>Student Success and Professional Development II 1</b> Continuing development of the essential skills, attitudes, and values for practicing health care professionals. Typically offered Fall.	8-24
PHARMACY	541	Revise	<b>Applied Patient Care III: Medication Therapy Management 1 (0-3)</b> Identification of pertinent patient findings, assessment of drug-related problems and clinical problem solving. Typically offered Spring. <del>H, S, F grading.</del>	<b>Applied Patient Care III: Medication Therapy Management 1 (0-3)</b> Identification of pertinent patient findings, assessment of drug-related problems and clinical problem solving. Typically offered Spring.	1-25
PHARMACY	543	Revise	<b>Pharmacy Practice and Professional Development IV 1</b> Prepares student pharmacists for a focused 3-week Institutional Pharmacy Practice Experience. Typically offered Spring. <del>S, F grading.</del>	<b>Pharmacy Practice and Professional Development IV 1</b> Prepares student pharmacists for a focused 3-week Institutional Pharmacy Practice Experience. Typically offered Spring.	1-25
PHARMACY	544	Revise	<b>Pharmacotherapy III 4</b> Third in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Spring. <del>H, S, F grading.</del>	<b>Pharmacotherapy III 4</b> Third in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Spring.	1-25
PHARMACY	545	Revise	<b>Pharmacy Management 3</b> Management principles essential for common practice settings in the profession of pharmacy. Typically offered Fall. <del>H, S, F grading.</del>	<b>Pharmacy Management 3</b> Management principles essential for common practice settings in the profession of pharmacy. Typically offered Fall.	8-24

PHARMACY	551	Revise	<b>Applied Patient Care IV: Advanced Medication Therapy Management 2 (1-3)</b> Medication therapy management for complex patients; case-based discussions and human patient simulation. Typically offered Fall. <del>H, S, F grading.</del>	<b>Applied Patient Care IV: Advanced Medication Therapy Management 2 (1-3)</b> Medication therapy management for complex patients; case-based discussions and human patient simulation. Typically offered Fall.	8-25
PHARMACY	554	Revise	<b>Pharmacotherapy IV 4</b> Fourth in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Fall. <del>H, S, F grading.</del>	<b>Pharmacotherapy IV 4</b> Fourth in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Fall.	8-25
PHARMACY	555	Revise	<b>Drug Information and Literature Evaluation 4</b> Evaluation of drug information in pharmaceutical and biomedical literature to provide better patient care. Typically offered Spring. <del>H, S, F grading.</del>	<b>Drug Information and Literature Evaluation 4</b> Evaluation of drug information in pharmaceutical and biomedical literature to provide better patient care. Typically offered Spring.	1-26
PHARMACY	556	Revise	<b>Student Success and Professional Development III 1</b> Enhanced development of the essential skills, attitudes, and values for practicing health care professionals. Typically offered Fall. <del>S, F grading.</del>	<b>Student Success and Professional Development III 1</b> Enhanced development of the essential skills, attitudes, and values for practicing health care professionals. Typically offered Fall.	8-25
PHARMACY	557	Revise	<b>Pharmacotherapy V 4</b> Fifth in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Spring. <del>H, S, F grading.</del>	<b>Pharmacotherapy V 4</b> Fifth in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. Typically offered Spring.	1-26
PHARMACY	558	Revise	<b>Applied Clinical Pharmacokinetics 2</b> Clinical applications of pharmacokinetics including theoretical background and application to patient care. Typically offered Spring. <del>H, S, F grading.</del>	<b>Applied Clinical Pharmacokinetics 2</b> Clinical applications of pharmacokinetics including theoretical background and application to patient care. Typically offered Spring.	1-25

PHARMACY	559	Revise	<b>Quality Assurance and Patient Safety 2</b> Patient safety issues including quality assurance, medication error avoidance and risk management in healthcare systems. Typically offered Spring. <del>H, S, F grading.</del>	<b>Quality Assurance and Patient Safety 2</b> Patient safety issues including quality assurance, medication error avoidance and risk management in healthcare systems. Typically offered Spring.	1-25
PHARMACY	561	Revise	<b>Applied Patient Care V: Integrated Patient Care 2</b> (1-3) Integration of pharmaceutical care with an interdisciplinary emphasis using patient cases and human patient simulation. Typically offered Spring. <del>H, S, F grading.</del>	<b>Applied Patient Care V: Integrated Patient Care 2</b> (1-3) Integration of pharmaceutical care with an interdisciplinary emphasis using patient cases and human patient simulation. Typically offered Spring.	1-26
PHARMACY	563	Revise	<b>Pharmacy Practice and Professional Development VI 2</b> Provides student pharmacists with continuing patient care and professional development activities in preparation for the Advanced Pharmacy Practice Experience rotations. Typically offered Spring. <del>S, F grading.</del>	<b>Pharmacy Practice and Professional Development VI 2</b> Provides student pharmacists with continuing patient care and professional development activities in preparation for the Advanced Pharmacy Practice Experience rotations. Typically offered Spring.	1-26
PHARMACY	564	Revise	<b>Pharmacy Law and Regulatory Affairs 3</b> Legal and ethical pharmacy practice including licensing, patient privacy protection, order fulfillment and contracts. Typically offered Spring. <del>H, S, F grading.</del>	<b>Pharmacy Law and Regulatory Affairs 3</b> Legal and ethical pharmacy practice including licensing, patient privacy protection, order fulfillment and contracts. Typically offered Spring.	1-26
PHARMACY	566	Revise	<b>Therapeutics of Special Populations 3</b> Special therapeutic needs of unique populations including pediatrics, chronic neurologic disorders, hospice care and immuno-compromised patients. Typically offered Fall. <del>H, S, F grading.</del>	<b>Therapeutics of Special Populations 3</b> Special therapeutic needs of unique populations including pediatrics, chronic neurologic disorders, hospice care and immuno-compromised patients. Typically offered Fall.	8-25
PHARMSCI	590	New	--N/A--	<b>Journal Club: Critical Appraisal of Scientific Articles</b> 1 May be repeated for credit; cumulative maximum 8 credits.	8-23

				<p>Course Prerequisite: Graduate standing in the Pharmaceutical Sciences graduate program and permission from the instructor. Critical analysis, presentation, and discussion of published journal articles in the biomedical sciences. Typically offered Fall and Spring. S, F grading.</p>	
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## Proposed Modification in Grading Changing from H/S/F to A/B/C/F in the PharmD Didactic Curriculum

*Background:*

For nearly a decade the Doctor of Pharmacy (PharmD) program adopted a competency-based curriculum that utilized a Honors, Satisfactory and Fail (H/S/F) grading system. The intent was to decrease student to student competition and reduce student stress. The hope was to focus student attention on learning rather than the attainment of grades. The results were mixed. Some students thrived under this model, while others struggled with work prioritization and attention, resulting in the less-than-optimal academic outcomes due to seemingly unsurmountable levels of work culminating at the end of the term. Beyond considerations regarding student stress and learning, there was also the perception that not having a GPA placed our graduates at a disadvantage when applying for post-graduate job opportunities.

During the June 2022 retreat of the College of Pharmacy and Pharmaceutical Sciences, the faculty considered moving back to a traditional grading scale. The result of the discussions was majority support to migrate to an A/B/C/F grading scale with 70% as the minimum acceptable level of passing for all required didactic coursework.

The proposed plan for implementation is to move to A/B/C/F grades with the class of 2027, matriculating fall 2023. The classes of 2025 and 2026 would be maintained under an H/S/F grading model. Courses retaining non-ACBF grading include elective coursework and experiential courses Pharmacy 533, 553, 581-587.

Implementation would be phased in will the class of 2027, as follows:

Professional Year (PY)	Courses	Term of Proposed A/B/C/F Implementation
PY1 Fall	PharDSci 502, 504, 508, 528, Pharmacy 506, 507, 509, 516	Fall 2023
PY1 Spring	PharDSci 510, 512, 518, 519, Pharmacy 501, 513, 514	Spring 2024
PY2 Fall	PharDSci 532, Pharmacy 530, 531, 534, 536, 545	Fall 2024
PY2 Spring	PharDSci 542, 547, Pharmacy 541, 543, 544, 558, 559	Spring 2025
PY3 Fall	Pharmacy 551, 554, 556, 566	Fall 2025
PY3 Spring	Pharmacy 555, 557, 561, 563, 564	Spring 2026

*Summary of proposed changes:*

- 1) Modify the grading for all didactic courses listed in the chart above
- 2) Implement changes with the next matriculating class
- 3) Maintain H/S/F grading for all cohort years that matriculated before 2022

*Attachments:*

- Updated course catalog descriptions
- Updated syllabi for all didactic courses organized by academic year



*Approvals:*

- PharmSci on 9.7.22
- Pharmacotherapy on 9.12.22
- Curriculum Committee on 9.26.22
- Full Faculty on 9.26.22