2026

Academic Catalog 2025–26: Addendum

Effective: Spring 2026

KECK GRADUATE INSTITUTE

A Member of The Claremont Colleges

KECK GRADUATE INSTITUTE | 535 Watson Dr. Claremont, CA 91711

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Summary of Catalog Changes

This addendum supersedes all previously published catalog language related to the items listed below, as of Spring 2026. This summary highlights key academic program, course, and policy changes included in this addendum.

Program Updates
The Master of Community Health Administration (MCHA) program will be renamed Master of Health Administration (MHA) beginning in the Fall 2026 term. While the full program change will be reflected in a future academic catalog, students enrolled under the current catalog may request to adopt the new program name by submitting an Academic Petition Form. Approval of the petition will determine the program name under which the student continues enrollment and graduates.

Program Additions
The following program has been added to the academic catalog through this addendum:

- Master of Science in Biopharmaceutical Process Engineering (MSBPE)

Program Requirement Changes
The graduation requirements for the following programs have been revised in this addendum:

- Master of Science in Physician Associate Studies (MSPA)
- Doctor of Pharmacy (PharmD)

Course Updates
Course additions and revisions are included in this addendum. Please refer to the Course Catalog section for complete and current course information.

Policy Updates and Additions
Three institutional policies have been revised, and one new policy has been added in this addendum. Updated policy language replaces all prior versions where applicable.

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Henry E. Riggs School of Applied Life Sciences 2025-26 Academic Calendar

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Riggs School Academic Calendar

2025-2026

Fall 2025	School	Program	Event
August 15, 2025	All Schools	All Schools	New International Student Orientation
August 18 - August 22, 2025	Riggs	Riggs	Riggs School Academic Prologue
August 25, 2025	All Schools	All Schools	First Day of Instruction (Module 1 and Full Semester)
August 29, 2025	Riggs	MS/MCHA	Last Day to Submit MS/MCHA Thesis Contract
September 1, 2025	All Schools	All Schools	Labor Day (KGI Campus Closed)
September 5, 2025	All Schools	All Schools	Last Day to Add or Drop Module 1 or Full Semester Course
September 5, 2025	Riggs	Riggs	TMP Kick Off Day
October 3, 2025	Riggs	Riggs	Last Day to Withdraw Module 1 Course
October 17, 2025	All Schools	All Schools	Last Day of Module 1 Courses
October 20, 2025	All Schools	All Schools	First Day of Module 2 Courses
October 24, 2025	All Schools	All Schools	Grades Due for Module 1 courses
October 31, 2025	All Schools	All Schools	Last Day to Add or Drop Module 2 Course
November 7, 2025	All Schools	All Schools	Last Day to Withdraw Full Course
November 10, 2025	Riggs	PhD	Last Day to Schedule Dissertation Defense for Fall 2025
November 11 – November 14, 2025	All Schools	All Schools	7C Pre-registration for Spring Term
November 21, 2025	Riggs	Riggs	Last Day to Withdraw Module 2 Course
November 21, 2025	All Schools	All Schools	Last Day to Submit Intent to Graduate Form for Fall 2025
November 24 - January 30, 2026	All Schools	All Schools	Spring Registration
November 26 – November 28, 2025	All Schools	All Schools	Thanksgiving Break (KGI Campus Closed)
December 1, 2025	Riggs	PhD	Last Day to Defend PhD Dissertation for Fall Graduates
December 5, 2025	Riggs	Riggs	TMP Confidential Faculty Presentations

December 5, 2025	All Schools	All Schools	Last Day of Instruction
December 8 - December 12, 2025	All Schools	All Schools	Final Exams Week
December 12, 2025	All Schools	All Schools	Last Day of Module 2 and Full Semester Term
December 20 – January 4, 2026	All Schools	All Schools	Winter Closure (KGI Campus Closed)
January 9, 2026	Riggs	Riggs	Grades Due for Module 2 and Full Semester Term
Spring 2026	**School**	**Program**	**Event**
January 12 – January 16, 2026	Riggs	Riggs	TMP Work Week (Mandatory for TMP Participants)
January 16, 2026	All Schools	All Schools	New International Student Orientation
January 19, 2026	All Schools	All Schools	Martin Luther King, Jr. Day (KGI Campus Closed)
January 20, 2026	Riggs	All Programs	First Day of Instruction (Module 1 and Full Semester)
January 23, 2026	Riggs	MS/MCHA	Last Day to Submit MS/MCHA Thesis Contract
January 30, 2026	Riggs	All Programs	Last Day to Add or Drop Module 1 or Full Semester Course
February 27, 2026	Riggs	All Programs	Last Day to Withdraw Module 1 Course
March 13, 2026	Riggs	All Programs	Last Day of Module 1 Courses
March 16 – March 20, 2026	All Schools	All Schools	Spring Break
March 20, 2026	Riggs	All Programs	Grades Due Module 1 Courses
March 23, 2026	Riggs	All Programs	First Day of Module 2 Courses
March 26, 2026	All Schools	All Schools	Last Day to Submit Intent to Graduate Form for Spring 2026
March 27, 2026	All Schools	All Schools	Cesar Chavez Day Observed (KGI Campus Closed)
April 3, 2026	Riggs	All Programs	Last Day to Add or Drop Module 2 Course
April 3, 2026	Riggs	PhD	Last Day to Schedule Dissertation Defense
April 10, 2026	Riggs	All Programs	TMP Confidential Faculty Presentations
April 10, 2026	Riggs	All Programs	Last Day to Withdraw Full Course

April 21 – April 24, 2026	All Schools	All Schools	7C Pre-registration for Fall Term
April 28, 2026	Riggs	PhD	Last Day to Defend PhD Dissertation for Spring Graduates
May 1, 2026	Riggs	All Programs	Last Day to Withdraw Module 2 Course
May 1, 2026	Riggs	Riggs	Riggs School Capstone Symposium
May 4 - Sept 11, 2026	All Schools	All Schools	Fall Registration
May 8, 2026	Riggs	All Programs	Last Day of Instruction
May 11 - May 15, 2026	Riggs	All Programs	Final Exams Week
May 15, 2026	Riggs	All Programs	Last Day of Module 2 and Full Semester Term
May 16, 2026	All Schools	All Schools	Commencement
May 22, 2026	Riggs	All Programs	Grades Due for Module 2 and Full Semester Term
Summer 2026	**School**	**Program**	**Event**
May 18, 2026	Riggs	All Programs	First Day of Summer Term
May 22, 2026	Riggs	All Programs	Last Day to Add or Drop Summer Term Course
May 25, 2026	All Schools	All Schools	Memorial Day (KGI Campus Closed)
June 19, 2026	All Schools	All Schools	Juneteenth Day (KGI Campus Closed)
July 3, 2026	All Schools	All Schools	Independence Day Observed (KGI Campus Closed)
July 24, 2026	Riggs	All Programs	Last Day to Withdraw Full Course
August 21, 2026	Riggs	All Programs	Last Day of Summer Term
August 28, 2026	Riggs	All Programs	Grades Due for Summer Courses

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School of Health Sciences 2025-26 Academic Calendar

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School of Health Sciences Academic Calendar (SHS)

2025-2026

Fall 2025	School	Program	Event
August 15, 2025	All Schools	All Schools	New International Student Orientation
August 18 – August 22, 2025	All Schools	All Schools	Academic Prologue
August 18 – August 22, 2025	SHS	MSGC	Genetics Academic Orientation
August 19 – August 21, 2025	SHS	OTD	OTD3 Orientation
August 19 – August 22, 2025	SHS	MSPA	MSPA Orientation Class 2027
August 25, 2025	All Schools	All Schools	First Day of Instruction (Module 1 and Full Semester)
September 1, 2025	All Schools	All Schools	Labor Day (KGI Campus Closed)
September 5, 2025	All Schools	All Schools	Last Day to Add or Drop Module 1 or Full Term Course
October 3, 2025	SHS	OTD	Last Day to Withdraw Module 1 Course
October 3, 2025	SHS	MSGC	Last Day to Withdraw Module 1 Course
October 17, 2025	All Schools	All Schools	Last Day of Module 1 Courses
October 20, 2025	All Schools	All Schools	First Day of Module 2 Courses
October 24, 2025	All Schools	All Schools	Grades Due for Module 1 courses
October 31, 2025	All Schools	All Schools	Last Day to Add or Drop Module 2 Course
November 7, 2025	All Schools	All Schools	Last Day to Withdraw Full Courses
November 11– November 14, 2025	All Schools	All Schools	7C Pre-registration for Spring Term
November 21, 2025	All Schools	All Schools	Last Day to Submit Intent to Graduate Form for Fall 2025
November 21, 2025	SHS	OTD, MSGC	Last Day to Withdraw Module 2 Course
November 22 – November 30, 2025	SHS	MSPA	MSPA Thanksgiving Break
November 24 - January 30, 2026	All Schools	All Schools	Spring Registration
November 26 – November 28, 2025	All Schools	All Schools	Thanksgiving Break (KGI Campus Closed)

December 5, 2025	All Schools	All Schools	Last Day of Instruction
December 8, 2024 - December 12, 2025	All Schools	All Schools	Final Exams Week
December 12, 2025	SHS	OTD, MSGC	Last Day of Module 2 and Full Semester Term
December 12, 2025	SHS	MSPA	Last Day of Full Semester Term
December 13 – January 4, 2026	SHS	MSPA	MSPA Winter Break
December 15 – January 9, 2026	SHS	OTD	OTD Winter Break
December 17, 2025	SHS	MSPA	Grades Due for Full Term
December 20 – January 4, 2026	All Schools	All Schools	Winter Closure (KGI Campus Closed)
December 19, 2025	SHS	MSPA	MSPA 2025 Graduation Date
January 9, 2026	SHS	OTD, MSGC	Grades Due for Module 2 and Full Term
Spring 2026	**School**	**Program**	**Event**
January 5, 2026	SHS	OTD	OTD First day of instruction (Module 1 and Full Semester)
January 5, 2026	SHS	MSPA	MSPA First day of instruction Full Semester
January 16, 2026	SHS	OTD	Last Day to Add or Drop Module 1 or Full Term Course
January 16, 2026	SHS	MSPA	Last Day to Add or Drop Full Term Course
January 16, 2026	All Schools	All Schools	New International Student Orientaiton
January 19, 2026	All Schools	All Schools	Martin Luther King, Jr. Day (KGI Campus Closed)
January 20, 2026	SHS	MSGC	MSGC First Day of Instruction (Module 1 and Full Semester)
January 30, 2026	SHS	MSGC	Last Day to Add or Drop Module 1 or Full Semester Course
February 6, 2026	SHS	OTD	Last Day to Withdraw Module 1 Course
February 20, 2026	SHS	OTD	Last Day of Module 1 Courses
February 23, 2026	SHS	OTD	First Day of Module 2 Courses
February 27, 2026	SHS	MSGC	Last Day to Withdraw Module 1 Course

February 27, 2026	SHS	OTD	Module 1 Grades Due
March 13, 2026	SHS	MSGC	Last Day of Module 1 Courses
March 6, 2026	SHS	OTD	Last Day to Add or Drop Module 2 Course
March 16 – March 20, 2026	All Schools	All Schools	Spring Break
March 20, 2026	SHS	MSGC	Grades Due Module 1 Courses
March 23, 2026	SHS	MSGC	First Day of Module 2 Courses
March 26, 2026	All Schools	All Schools	Last Day to Submit Intent to Graduate Form for Spring 2026
March 26, 2026	SHS	MSPA, OTD	Last Day to Withdraw Full Course
March 27, 2026	All Schools	All Schools	Cesar Chavez Day Observed (KGI Campus Closed)
April 3, 2026	SHS	MSGC	Last Day to Add or Drop Module 2 Course
April 3, 2026	SHS	OTD	Last Day to Withdraw Module 2 Course
April 10, 2026	SHS	MSGC	Last Day to Withdraw Full Course
April 17, 2026	SHS	MSPA	Last Day of Instruction
April 20, 2026 - April 24, 2026	SHS	MSPA	Final Exams Week
April 21 – April 24, 2025	All Schools	All Schools	7C Pre-registration for Fall Term
April 24, 2026	SHS	MSPA	MSPA Last Day of Spring Term
April 24, 2026	SHS	OTD	Last Day of Instruction
April 25 – May 3, 2026	SHS	MSPA	MSPA Spring Break
May 1, 2026	SHS	MSGC	Last Day to Withdraw Module 2 Course
May 1, 2026	SHS	OTD	Last Day of Module 2 and Full term
May 1, 2026	SHS	MSPA	Grades Due Full Term
May 4 - Sept 11, 2026	All Schools	All Schools	Fall Registration
May 8, 2026	SHS	MSGC	Last Day of Instruction
May 8, 2026	SHS	OTD	Grades Due for Module 2 and Full Term

May 11, 2026 - May 15, 2026	SHS	MSGC	Final Exams Week
May 15, 2026	SHS	MSGC	Last Day of Module 2 and Full Semester Term
May 16, 2026	All Schools	All Schools	Commencement
May 22, 2026	SHS	MSGC	Grades Due for Module 2 and Full Semester Term
Summer 2026	**School**	**Program**	**Event**
May 4, 2026	SHS	MSPA	First Day of Summer Term
May 11, 2026	SHS	OTD	First Day of Summer Term Course
May 15, 2026	SHS	MSPA	Last Day to Add or Drop Summer Term
May 18, 2026	SHS	MSGC	First Day of Summer Term Course
May 22, 2026	SHS	OTD, MSGC	Last Day to Add or Drop Summer Term
May 25, 2026	All Schools	All Schools	Memorial Day (KGI Campus Closed)
June 19, 2026	All Schools	All Schools	Juneteenth Day (KGI Campus Closed)
July 2, 2026	SHS	OTD	Last Day to Withdraw Full Course
July 3, 2026	All Schools	All Schools	Independence Day Observed (KGI Campus Closed)
July 17, 2026	SHS	MSPA	Last Day to Withdraw Full Course
July 24, 2026	SHS	MSGC	Last Day to Withdraw Full Course
July 24, 2026	SHS	OTD	Last Day of Summer Term for Class of 2028
July 31, 2026	SHS	OTD	Last Day of Summer Term for Class of 2027
August 7, 2026	SHS	OTD	Grades Due for Summer Courses
August 14, 2026	SHS	MSPA	Last Day of Summer Term
August 21, 2026	SHS	MSPA	Grades Due for Summer Courses
August 21, 2026	SHS	MSGC	Last Day of Summer Term
August 28, 2026	SHS	MSGC	Grades Due for Summer Courses

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School of Pharmacy 2025-26 Academic Calendar

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School of Pharmacy Academic Calendar (SOP)

2025-2026

Fall 2025	School	Program	Event
August 15, 2025	All Schools	All Schools	New International Student Orientation
August 18 – August 22, 2025	SOP	PharmD	New PharmD P1 Academic Prologue
August 18 – September 26, 2026	SOP	PharmD	APPE Block 3
August 25, 2025	All Schools	All Schools	First Day of Instruction (Module 1 and Full Semester)
September 1, 2025	All Schools	All Schools	Labor Day (KGI Campus Closed)
September 5, 2025	All Schools	All Schools	Last Day to Add or Drop Module 1 or Full Semester Course
September 29 – November 7	SOP	PharmD	APPE Block 4
October 3, 2025	SOP	PharmD	Last Day to Withdraw Module 1 Course
October 17, 2025	All Schools	All Schools	Last Day of Module 1 Courses
October 20, 2025	All Schools	All Schools	First Day of Module 2 Courses
October 24, 2025	All Schools	All Schools	Grades Duefor Module 1 Courses
October 31, 2025	All Schools	All Schools	Last Day to Add or Drop Module 2 Course
November 7, 2025	All Schools	All Schools	Last Day to Withdraw Full Course
November 10 – December 19, 2025	SOP	PharmD	APPE Block 5
November 11 – November 14, 2025	All Schools	All Schools	7C Pre-registration for Spring Term
November 21, 2025	SOP	PharmD	Last Day to Withdraw Module 2 Course
November 21, 2025	All Schools	All Schools	Last Day to Submit Intent to Graduate Form for Fall 2025
November 24 - January 30, 2026	All Schools	All Schools	Spring Registration
November 26 – November 28, 2025	All Schools	All Schools	Thanksgiving Break (KGI Campus Closed)
December 5, 2025	All Schools	All Schools	Last Day of Instruction
December 8, 2025 - December 12, 2025	All Schools	All Schools	Final Exams Week

December 12, 2025	All Schools	All Schools	Last Day of Module 2 and Full Semester Term
December 12, 2025	SOP	PharmD	Grades Due for Module 2 and Full Semester Term
December 20 – January 4, 2026	All Schools	All Schools	Winter Closure (KGI Campus Closed)
Spring 2026	**School**	**Program**	**Event**
January 5 - January 9, 2026	SOP	PharmD	Intercession Extended Learning
January 5 – February 13, 2026	SOP	PharmD	APPE Block 6
January 16, 2026	All Schools	All Schools	New International Student Orientation
January 19, 2026	All Schools	All Schools	Martin Luther King, Jr. Day (KGI Campus Closed)
January 20, 2026	SOP	PharmD	First Day of Instruction (Module 1 and Full Semester)
January 30, 2026	SOP	PharmD	Last Day to Add or Drop Module 1 or Full Semester Course
February 16 – March 27, 2026	SOP	PharmD	APPE Block 7
February 27, 2026	SOP	PharmD	Last Day to Withdraw Module 1 Course
March 13, 2026	SOP	PharmD	Last Day of Module 1 Courses
March 16 – March 20, 2026	All Schools	All Schools	Spring Break
March 20, 2026	SOP	PharmD	Grades Due Module 1 Courses
March 23, 2026	SOP	PharmD	First Day of Module 2 Courses
March 26, 2026	All Schools	All Schools	Last Day to Submit Intent to Graduate Form for Spring 2026
March 27, 2026	All Schools	All Schools	Cesar Chavez Day Observed (KGI Campus Closed)
April 3, 2026	SOP	PharmD	Last Day to Add or Drop Module 2 Course
April 10, 2026	SOP	PharmD	Last Day to Withdraw Full Course
April 21 – April 24, 2026	All Schools	All Schools	7C Pre-registration for Fall Term
May 1, 2026	SOP	PharmD	Last Day to Withdraw Module 2 Course
May 4 - Sept 11, 2026	All Schools	All Schools	Fall Registration

May 8, 2026	SOP	PharmD	Last Day of Instruction
May 11, 2025 - May 15, 2026	SOP	PharmD	Final Exams Week
May 15, 2026	SOP	PharmD	Last Day of Module 2 and Full Semester Term
May 16, 2026	All Schools	All Schools	Commencement
May 22, 2026	SOP	PharmD	Grades Due for Module 2 and Full Semester Term
Summer 2026	**School**	**Program**	**Event**
May 18 – June 5, 2026	SOP	PharmD	IPPE 3/CEE Block 1
May 18 - June 19, 2026	SOP	PharmD	IPPE 1/CEE Block 1
May 18 – June 26, 2026	SOP	PharmD	APPE Block 1
May 25, 2026	All Schools	All Schools	Memorial Day (KGI Campus Closed)
June 8 – June 26, 2026	SOP	PharmD	IPPE 3/CEE Block 2
June 19, 2026	All Schools	All Schools	Juneteenth Day (KGI Campus Closed)
June 22 - July 24, 2026	SOP	PharmD	IPPE 1/CEE Block 2
June 29 – July 17, 2026	SOP	PharmD	IPPE 3/CEE Block 3
June 29 – August 7, 2026	SOP	PharmD	APPE Block 2
July 3, 2026	All Schools	All Schools	Independence Day Observed (KGI Campus Closed)
July 20 - August 7, 2026	SOP	PharmD	IPPE 3/CEE Block 4
August 14, 2026	All Schools	All Schools	Grades Due for Summer Courses

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KGI Campus Map

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Campus Map

Directions / Parking

Please observe all signs and stencils.

KGI

Students, staff, and faculty may park in the following areas:

A B C D E I K

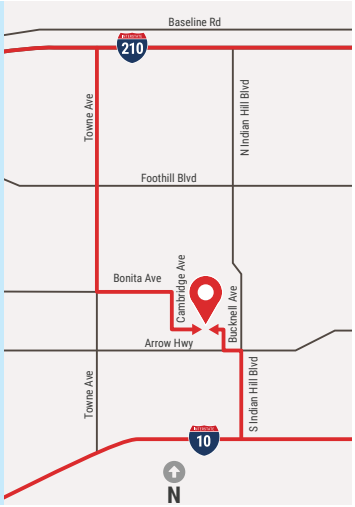
KGI Visitors

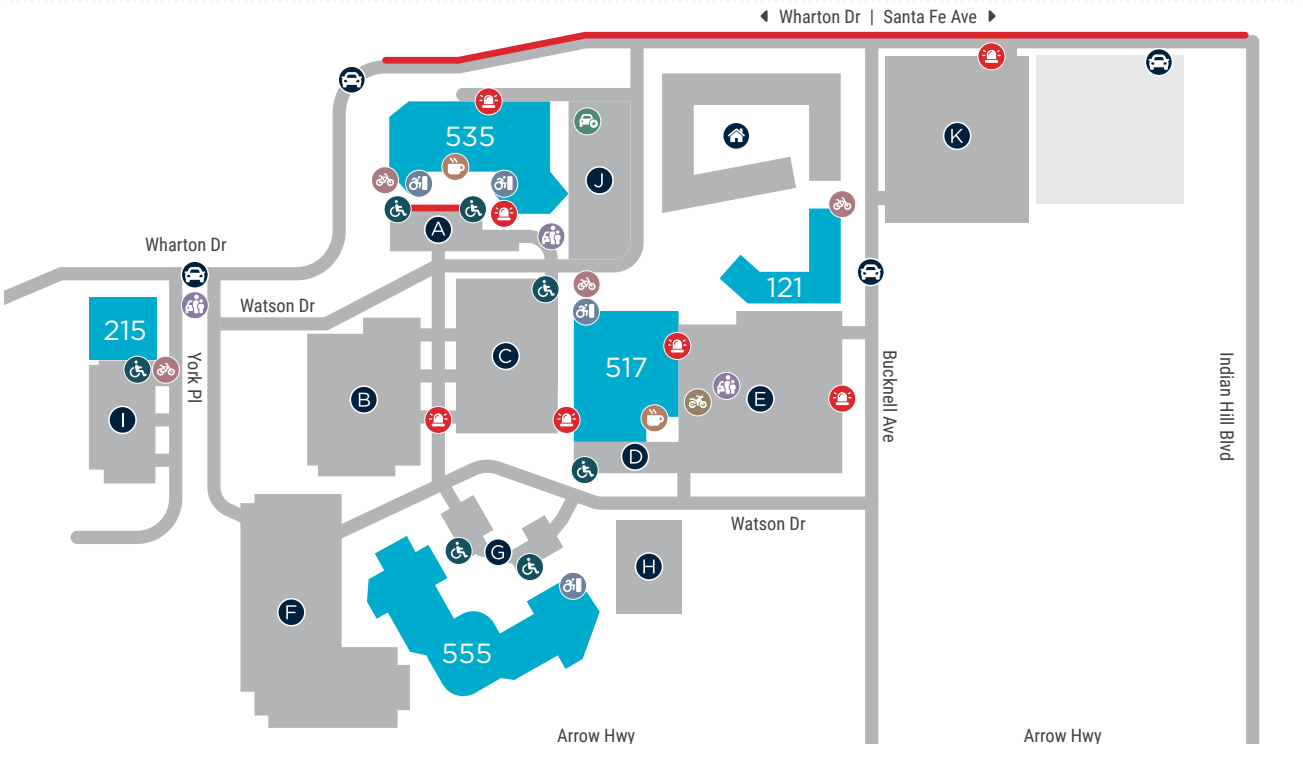
Visitors may park in Lot A without a permit, and the following areas with a permit (obtain a permit from the staff or faculty member you are meeting with):

Directions
535 Watson Dr.
Claremont, CA 91711

From Interstate 210
- Exit Towne, Head South
- Turn East onto Bonita
- Turn South onto Cambridge
- Turn East onto Wharton
- Turn South onto Watson

From Interstate 10
- Exit Indian Hill, Head North
- Turn West onto Arrow
- Turn North onto Bucknell
- Turn West onto Watson





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Accreditations

Keck Graduate Institute

535 Watson Dr
Claremont, CA 91711
(909) 607-7855

Keck Graduate Institute (KGI) is accredited by the Western Association of Schools and Colleges (WASC) Senior College and University Commission (WSCUC). Visit wscuc.org for more details.

Additional information about KGI's accreditation and its School of Pharmacy and School of Health Sciences' professional accreditations for each specific degree program can be found online at kgi.edu/accreditation.

WASC Accreditation Statement

Keck Graduate Institute (KGI) is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges:

Western Association of Schools and Colleges

985 Atlantic Avenue, #100
Alameda, CA 94501
510.748.9001 | wscuc.org

Complaints Related to WASC Standards

KGI has an obligation to respond to any written complaints by students lodged against the Institute that are related to the standards of the accrediting body. At any time, a student or prospective student can contact WASC directly through the website to access the standards and the procedures for filing a complaint. If the student or prospective student prefers to discuss the complaint locally with the School's Administration, the student is encouraged to present the complaint (in writing) to the Office of the Dean. These complaints will be recorded and provided to WASC upon request.

ACGC Accreditation Statement

The Master of Science in Human Genetics and Genetic Counseling program at Keck Graduate Institute is accredited by the Accreditation Council for Genetic Counseling (ACGC):

Accreditation Council for Genetic Counseling

4400 College Boulevard,
Ste. 220 Overland Park, KS
66211 913.222.8668 |
gceducation.org

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Complaints Related to ACGC Standards

Any person concerned about the quality of a Genetic Counseling Program accredited by the Accreditation Council for Genetic Counseling (ACGC) may contact the ACGC Executive Office. Complaints regarding a program should be made in writing to the ACGC Executive Office. The ACGC Board will consider and investigate those complaints containing allegations which, if substantiated, may indicate noncompliance with accreditation standards. For more specific information on these policies and procedures for filing a complaint, please visit the website.

ACPE Accreditation Statement

Keck Graduate Institute's School of Pharmacy Doctor of Pharmacy (PharmD) program is accredited by the Accreditation Council for Pharmacy Education.

Accreditation Council for Pharmacy Education

135 South LaSalle Street, Suite 4100
Chicago, Illinois 60603
312.664.3575 | FAX 312.664.4652 | acpe-accredit.org

Complaints Related to ACPE Standards

KGI School of Pharmacy has an obligation to respond to any written complaints by students lodged against the School that are related to the standards of the accrediting body. At any time, the student pharmacist or prospective student pharmacist can contact ACPE directly through the website to access the standards and the procedures for filing a complaint. Click here.

If the student pharmacist or prospective student pharmacist prefers to discuss the complaint locally with the School's administration, the student is encouraged to present the complaint (in writing) to the Office of the Dean. These complaints will be recorded and provided to ACPE upon request.

MSPA Accreditation Statement

The ARC-PA has granted Accreditation-Provisional status to the Keck Graduate Institute Physician Associate Program sponsored by Keck Graduate Institute.

Accreditation-Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program's ability to meet the ARC-PA Standards or when a program holding Accreditation-Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students.

Accreditation-Provisional does not ensure any subsequent accreditation status. It is limited to no more than five years from matriculation of the first class.
The program's accreditation history can be viewed on the ARC-PA website at http://www.arc-pa.org/accreditation-history-keck-graduate-institute/.

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OTD Accreditation Statement

KGI's entry-level occupational therapy doctoral degree program has received pre-accreditation status from Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) and is able to enroll students. Located at 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929.

ACOTE's telephone number c/o AOTA is 301.652.AOTA and its web address is www.acote-online.org. The program must be granted Candidacy Status, have a pre-accreditation review, complete an on-site evaluation, and be granted Accreditation Status before its graduates will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT
Certification Examination. Note that a felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

State of California Complaint Process

An individual may contact the Bureau for Postsecondary Education for review of a complaint. The bureau may be contacted at:

Bureau for Postsecondary Education 2535 Capital Oaks Drive, Suite 400
Sacramento, CA 95833
916.431.6924 | FAX: 916.263.1897 | bppe.ca.gov

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About our Schools

Henry E. Riggs School of Applied Life Sciences

The Riggs School offers innovative programs that integrate the life sciences, engineering, and business with a focus on industry-sponsored projects and internships.

School of Pharmacy

SOP cultivates future pharmacy leaders who will ensure ethical, safe, effective, accessible, and equitable use of medications.

School of Health Sciences

SHS prepares students for an impactful career in healthcare at the forefront of industry, technology, and patient care.

For more information, please visit About Our Schools.

KECK GRADUATE INSTITUTE
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Henry E. Riggs School of Applied Life Sciences

Mission

The KGI Henry E. Riggs School of Applied Life Sciences (Riggs School) is dedicated to education and research aimed at translating into practice the power and potential of the life sciences for the benefit of society.

Culture

KGI seeks to sustain an interdisciplinary and entrepreneurial culture, working in partnership with industry to develop leaders for the biosciences, while promoting academic freedom and the highest ethical standards.

Core Values

We are:

- Entrepreneurial and Reflective
- Ethical and Responsible
- Collaborative and Independent
- Interdisciplinary and Applied

Core Values in Detail

Entrepreneurial and Reflective

- Encourages experimentation
- Encourages new ventures, both internal and external, and treats them as learning opportunities
- Tolerates risks and accepts that some experiments fail
- Acknowledges that anxiety and ambiguity often attend risk-taking
- Treats each member of KGI as a partner who has a role in making it a success
- Remains small, agile, and un-bureaucratic
- Challenges higher education conventions
- Takes the time and effort to learn lessons from the past and to plan for the future
- Encourages change that arises from self-reflection
- Works actively to foster personal, professional, and intellectual growth for everyone in the KGI community

Ethical and Responsible

- Is dedicated to the highest ethical standards in all activities: learning, research, business, personal interactions, and external relations
- Recognizes that potential conflicts of interest cannot always be avoided, but they can and must be openly acknowledged and carefully managed
- Pursues open, honest, and frank interactions with each other and with our external partners
- Is dedicated to “benefit society”
- Works to raise awareness and develop innovative solutions to ethical issues facing the bioscience industry

- Trusts each member of the KGI community to take responsibility for their own actions
- Empowers all KGI members to “own” the process of their learning and professional growth and supports them in these efforts

Collaborative and Independent

- Promotes collaboration among the KGI staff, students, and faculty
- Actively partners with industry, non-profits, educational, and government institutions
- Preserves vigorously the highest standards of academic freedom
- Cooperates with other Claremont Colleges to leverage the strengths of these diverse institutions and the consortium
- Sees team-based activities as central to learning, research, and administration
- Acknowledges that true collaboration requires flexibility, information sharing, frequent communication, and mutual respect

In an Interactive Learning Environment

- Encourages all members of the KGI community to continue to develop their capabilities
- Fosters discussion and debate within the classroom
- Actively involves students in the design of course offerings and seeks their feedback to foster improvements
- Dedicates itself to action learning through projects
- Seeks a multi-talented and diverse student body whose members can learn from each other

Interdisciplinary and Applied

- Pursues integrated, cross-disciplinary research and teaching as central to KGI’s mission
- Avoids creation of separate academic departments that might foster isolation and discourage interdisciplinary work
- Works closely with industry in all aspects of the KGI curriculum — technical, management and ethics — and through the summer internships and Team Master's Projects
- Involves individuals from industry as full-time, adjunct, and guest faculty members
- Seeks input from industry members on the KGI Board of Trustees and Advisory Council to ensure the ongoing relevance of KGI’s curriculum and research directions

Henry E. Riggs School of Applied Life Sciences Programs

- Certificate in Applied Genomics (CAG)
- Postbaccalaureate Pre-PA Certificate (PPA)
- Postbaccalaureate Premedical Certificate (PPC)
- Master of Biotechnology (MBM)*
  - Master of Biotechnology (MBM) Foundation Certificate: Bioscience Management
  - Master of Biotechnology (MBM) Specialty Certificate: Healthcare Economics
  - Master of Biotechnology (MBM) Specialty Certificate: Regulatory Affairs
  - Master of Biotechnology (MBM) Specialty Certificate: Leadership
  - Master of Biotechnology (MBM) Specialty Certificate: Supply Chain Operations

- Master of Business and Science (MBS)
- Master of Community Health Administration (MCHA)*
  - Master of Community Health Administration (MCHA) Specialty Certificate: Community Health
  - Master of Community Health Administration (MCHA) Specialty Certificate: Health Systems
  - Master of Community Health Administration (MCHA) Specialty Certificate: Healthcare Economics
  - Master of Community Health Administration (MCHA) Specialty Certificate: Leadership
- Master of Engineering in Biopharmaceutical processing (Meng)
- Master of Science in Biopharmaceutical Process Engineering (MSBPE)
- Master of Science in Applied Life Sciences (MS)
- Master of Science in Human Genetics and Genomic Data Analytics (MSGDA)
- Master of Science in Medical Device Engineering (MSMDE)
- Doctor of Philosophy in Applied Life Sciences (PhD)

*Denotes professional continuing education program

Henry E. Riggs School of Applied Life Sciences Dean and Program Directors

Angelika Niemz, Associate Dean of Faculty and Professor. PhD, University of Massachusetts.

Steve Casper, Professor of Management and Program Director, Master of Business and Science. PhD, Cornell University.

Saurav Datta, Associate Professor, Amgen Bioprocessing Center and Program Director, Master of Engineering in Biopharmaceutical Processing. PhD, University of Kentucky.

Gargi Ghosh, Associate Professor, Bioprocessing and Interim Program Director, Master of Engineering in Biopharmaceutical Processing. PhD, University of Kentucky, Lexington.

Anna Hickerson, Associate Professor and Program Director, Master of Science in Medical Device Engineering. PhD, California Institute of Technology.

Joon Kim, Instructor and Senior Program Director, Postbaccalaureate Programs. PhD, University of Southern California.

Barbara Kraatz Fortini, Associate Professor of Genetics and Program Director, Master of Science in Human Genetics and Genomic Data Analytics and Director of the Center for Training in Applied Ge- nomics. PhD, California Institute of Technology.

Anastasia Levitin, Professor of Practice and Program Director, Master of Science in Applied Life Sciences and Master of Community Health Administration. PhD, Concordia University.

Jeniffer Hernandez, Associate Professor of Immunology and Program Director, Doctor of Philosophy in Applied Life Sciences. PhD, University of California, Irvine.

Henry E. Riggs School of Applied Life Sciences Faculty

Shiva Abdolrahimi, Assistant Professor in Bioprocessing. PhD, Amirkabir University of Technology.

Ed Arnheiter, Instructor. PhD, University of Massachusetts.

Barbara Bailus, Assistant Professor of Genetics, Variant Science. PhD, University of California, Davis.

Steve Casper, Henry E. Riggs Professor of Management. PhD, Cornell University.

Saurav Datta, Associate Professor, Amgen Bioprocessing Center and Program Director, Master of Engineering in Biopharmaceutical Processing. PhD, University of Kentucky.

Larry Davis, Professor of Practice. PharmD, University of California, San Francisco.

Gargi Ghosh, Associate Professor, Bioprocessing. PhD, University of Kentucky, Lexington.

Larry Grill, Research Professor, Henry E. Riggs School of Applied Life Sciences. PhD, University of California, Riverside.

Anna Hickerson, Associate Professor. PhD, California Institute of Technology.

J. Cesar Ignacio Espinoza, Assistant Professor Bioinformatics and Data Analytics. PhD, The University of Arizona.

Joon Kim, Senior Director and Instructor of PPC Program. EdD, University of Southern California.

Barbara Kraatz Fortini, Associate Professor of Genetics, Program Director, MS Human Genetics and Genomic Data Analytics, and Director of the Center for Training in Applied Genomics. PhD, California Institute of Technology.

Anastasia Levitin, Professor of Practice and Director of Academic Affairs for the Gateway Master's Program. PhD, Concordia University.

Haibo Liu, Assistant Professor, Management. PhD, INSEAD.

Yun Liu, Associate Professor. PhD, University of Maryland.

Loren Martin, Associate Vice Provost of Research, Innovation, and Partnerships. PhD, University of Tennessee.

Joshua Morris, Associate Vice Provost of Educational Effectiveness and Faculty Development.

PhD, University of California, Los Angeles.

Angelika Niemz, Associate Dean of Faculty and Professor. PhD, University of Massachusetts.

Maxim Polonsky, Assistant Professor, Marketing. PhD, University of Connecticut.

Megan Prosser, Provost and Vice President of Academic Affairs. PhD, City of Hope.

Animesh Ray, Professor, Systems Biology and Genomics. PhD, Monash University.

Shelly Schuster, Professor. PhD, University of Arizona.

Ilya Tolstorukov, Professor - Research. PhD, All-Union Research Institute of Genetics and Selection of Industrial Microorganisms, Moscow, Russia.

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School of Health Sciences (SHS)

Mission

The School of Health Sciences is dedicated to the education of innovative healthcare professionals who will serve the needs of individual patients, diverse communities, and the healthcare system as a whole. Our programs emphasize interprofessional collaboration, leadership, evidence-based practice, and person-centered care.

Vision

The School of Health Sciences (SHS) will prepare graduates who are leaders among healthcare professionals dedicated to delivering advanced personally-optimized patient care and the translation of ap- plied and clinical science breakthroughs to enhance the quality of life. We will work to better society by developing innovative, collaborative, culturally competent, articulate, and caring healthcare professionals.

Core Values

We believe in:

- An interactive learning environment
- Interprofessional collaboration independent
- Reflective development and independent growth
- Evidence-based decision making
- Entrepreneurial approach to practice
- Patient-centered compassionate care
- Community commitment
- Ethical and responsible behaviors

Goals

- Recruit, retain, and educate highly qualified students with diverse backgrounds, who will be professional, motivated, ethical, and culturally sensitive leaders
- Recruit, develop, and retain highly qualified faculty with diverse backgrounds, who are forward thinking and leaders in education, professionalism, and clinical settings
- Use innovative and active techniques to provide an academic program that fosters critical thinking, problem-solving, clinical reasoning, and self-directed learning skills
- Collaborate with healthcare leaders to inform curricular development to provide graduates with cutting-edge knowledge and skills to advance the practice
- Prepare graduates to practice effectively in a wide variety of currently existing and potential future roles in hospitals and medical centers
- Produce graduates who can communicate effectively with patients, caregivers, and healthcare professionals
- Promote interprofessional education
- Sustain a culture of professionalism and collegiality in relationships among and between faculty, students, and professionals

- Demonstrate a commitment to minimizing health and educational disparities in underrepresented communities and show sensitivity to the needs of a diverse community
- Develop and maintain a research infrastructure that promotes collaboration, innovation, and discovery in the educational, basic, translational, clinical, and computational sciences to enhance healthcare
- Promote life-long learning through participation in professional development, organizations, and publications
- Utilize continuous quality improvement through assessment and evaluation of desired outcomes in all phases of the program

MSGC Program Advisory Board

The KGI MSGC Advisory Board's purpose is to provide professional collaboration and strategic counsel to further the mission, vision, and goals of KGI and the MSGC program. The Board will provide input on program advancement, including didactic, experiential and research development, reflective of current and emerging areas of practice. The Board, comprised of clinical and industry genetics professionals, clinical researchers, educators, and members of patient advocacy organizations, acts as a liaison between program development and actual practice, offers support and recommendations on how to achieve the Program's goals, including longevity and 12 sustainability, student retention and success, and ensuring diversity, equity, and inclusion. The Board provides feedback on the achievement and success of the Program's goals and values.

The MSGC Advisory Board meets a minimum of one time per year. Members are nominated by KGI administrators and MSGC Program Leadership. Meetings with be recorded/documented to allow for adequate and timely follow up. Yearly meetings, ideally held during summer and/or winter, will include review of curriculum, didactic and clinical evaluations and outcomes, updates on clinical and industry partners, site development and updates on graduate employment and ABGC examination pass rates. Student course evaluations, cumulative logbook data, as well as alumni and employer surveys/evaluations will be used to report outcomes. Updates on capstones, including accepted posters or abstracts for publication, will be discussed. Any proposed modifications to didactic and clinical curriculum will be reviewed with the Curriculum Committee within two months. Accepted modifications to curriculum will be implemented the following academic year, or as soon as possible, depending.

MSPA Program Advisory Board

The KGI MSPA Program Advisory Board (PAB) is composed of physician assistant/associate educators and members of the local healthcare community. Through this important collaboration, the PAB pro- vides input on program and curricular development; acts as a liaison between the program and clinical practice by sharing current standards and emerging clinical trends; offers recommendations on how to achieve the program's stated goals; assists in identifying clinical sites and employment opportunities; and provides feedback on the effectiveness and success of activities related to program goals.

The Program Advisory Board meets at least once per year. Members are nominated by KGI administrators and SHS faculty and staff.

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OTD Program Advisory Board

The KGI OTD Program Advisory Board's purpose is to provide strategic counsel to the OTD program leadership on issues relevant to current, emerging, and future practice. The Board's counsel helps to support the OTD program's growth and development in education, research, fieldwork, and capstone to provide a premier educational experience for students. Compromised of distinguished occupational therapy professionals, community leaders, and others holding expertise in areas relevant to the program's key initiatives, the Advisory Board will aim to provide assistance in:

Identifying current trends and practices in occupational therapy and the larger community

Advising on diversity, equity, and inclusion in all aspects of program from recruitment and admissions to didactic and experiential learning and student retention

Suggesting strategies for fulfilling the program's mission and values to meet needs in real-world contexts

Supporting KGI OTD's program through advisement for a diverse range of professional and community contexts. The OTD Advisory Board will meet twice yearly in the fall and spring. Board terms will be for three years with the option of renewing once.

School of Health Sciences Programs

- Master of Science in Human Genetics and Genetic Counseling (MSGC)
- Master of Science in Physician Associate Studies (MSPA)
- Occupational Therapy Doctorate (OTD)

School of Health Sciences Dean and Program Directors

Megan Prosser, Dean, School of Health Sciences. Provost and Vice President of Academic Affairs. PhD, City of Hope.

Christy Eskes, Professor of Practice and Program Director, Master of Science in Physician Associate Studies. DHSc, A.T. Still University, MPA, PA-C.

Shana Merrill, Assistant Professor and Program Director, Human Genetics and Genetic Counseling Program. PhD, University of North Carolina Greensboro, MS, Genetic Counseling.

Vikas Sharma, Professor of Practice and Program Director, Occupational Therapy Program. OTD, Chatham University.

School of Health Sciences Faculty

Kelly Auld-Wright, Assistant Professor, Occupational Therapy Doctorate. OTD, Thomas Jefferson University.

Barbara Bailus, Assistant Professor of Genetics, Variant Science. PhD, University of California, Davis.

Lauren Bolda, Assistant Professor and Director of Clinical Education, Master of Science in Physician Associate Studies Program. DMSc, University of Lynchburg.

Claire Choi, Assistant Professor and Academic Fieldwork Coordinator, Occupational Therapy Doctorate. OTD, University of Southern California.

Marie Chuldzhyan, Assistant Professor and Associate Program Director, Master of Science in Human Genetics and Genetic Counseling Program. MS, Long Island University CW Post.

Katie Deponte, Assistant Professor, Master of Science in Physician Associate Studies Program. MSPAS, Midwestern University.

Katia Dergham, Professor of Practice and Interim Program Co-Director, Master of Science in Human Genetics and Genetic Counseling Program. MS, Sarah Lawrence College.

Christy Eskes, Program Director and Professor of Practice, Master of Science in Physician Associate Studies. DHSc, A.T. Still University, MPA, PA-C.

Erin Gysbers, Assistant Professor, Master of Science in Physician Associate Studies Program. DMSc, University of Lynchburg.

Breann Haight, Assistant Professor of Genetics and Interim Assistant Director of Curriculum, Master of Science in Human Genetics and Genetic Counseling Program. MS, Keck Graduate Institute.

Hanalynn Hunt, Assistant Professor and Capstone Coordinator, Occupational Therapy Program. OTD, University of Southern California.

Amanda Ingalls, Director of Didactic Education and Professor of Practice, Master of Science in Physician Associate Studies Program. DMSc, Butler University.

Yeon Kim, Assistant Professor, Master of Science in Physician Associate Studies Program. DMSc, Rocky Mountain University of Health Professions.

Yingyue Li, Assistant Professor of Genetics, Genetics Counselor. SC.M, Johns Hopkins University.

Ann McDonald, Professor, Occupational Therapy Doctorate Program. PhD, University of Southern California.

Stacey McIlroy, Principal Faculty, Assistant Professor, Master of Science in Physician Associate Studies Program. MMS, Midwestern University.

Yustina Nashid, Assistant Professor, Occupational Therapy Doctorate Program. OTD, Mount Mary University.

Melissa Randall, Professor of Practice and Interim Assistant Director of Fieldwork Training, Master of Science in Human Genetics and Genetic Counseling Program. MS, California State

University, Northridge

Alan Rothfeld, Medical Director, MSPA and Professor of Practice. MD, Baylor College of Medicine.

Ana Sanchez, Assistant Professor, Occupational Therapy Doctorate Program. OTD, University of Southern California.

Vikas Sharma, Program Director, Occupational Therapy Program and Professor of Practice. OTD, Chatham University.

Bill Sullivan, Assistant Professor and Director of Clinical Site Development, Master of Science in Physician Associate Studies Program. MS, A.T. Still University.

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School of Pharmacy (SOP)

Mission

The School of Pharmacy is dedicated to the education of innovative pharmacists who are collaborative, competent problem-solvers serving the needs of individual patients, communities, populations, healthcare systems, and the pharmaceutical industry. Our program cultivates future pharmacy leaders who will ensure ethical, safe, effective, accessible, and equitable use of medications.

Vision

The School of Pharmacy (SOP) will prepare graduates who are leaders among healthcare professionals dedicated to delivering advanced personally-optimized patient care and the translation of applied and clinical science breakthroughs to enhance the quality of life. We will work to better society by developing innovative, collaborative, culturally competent, articulate, and caring healthcare professionals.

Core Values

We believe in:

- Professionalism and patient-centeredness
- Respect for others and cultural humility
- An interactive learning environment
- Collaborative interactions and independent growth
- Reflective development
- Evidence-based decision making
- Entrepreneurial approach to practice
- Ethical and responsible behaviors
- Interdisciplinary translational and applied research
- Shared governance

Goals

- Recruit, retain, and educate highly qualified students with diverse backgrounds, who will be professional, motivated, ethical, and culturally sensitive leaders
- Recruit, develop, and retain highly qualified faculty with diverse backgrounds, who are forward thinking and leaders in education, professionalism, and clinical industry settings
- Use innovative and active techniques to provide an academic program that fosters critical thinking, problem-solving, clinical reasoning, and self-directed learning skills
- Collaborate with leaders of the health care and bioscience industries to inform curricular development to provide graduates with cutting-edge knowledge and skills to advance the practice
- Prepare graduates to utilize pharmacogenomics, operations management, informatics, and technology to practice effectively in a wide variety of currently existing and potential future roles in hospitals and medical centers, community pharmacy settings, academia, government, and the biopharmaceutical industry
- Produce graduates who can communicate effectively with patients, caregivers, and

healthcare, regulatory, and industrial professionals
- Promote interprofessional education and cooperation among pharmacy, healthcare professionals, and other biopharmaceutical professionals
- Sustain a culture of professionalism and collegiality in relationships among and between faculty, students, and professionals
- Demonstrate a commitment to minimizing health and educational disparities in underrepresented communities and show sensitivity to the needs of a diverse community
- Develop and maintain a research infrastructure that promotes collaboration, innovation, and discovery in the educational, basic, translational, clinical, and computational sciences to enhance healthcare
- Promote life-long learning through participation in professional development, organizations, and publications
- Utilize continuous quality improvement through assessment and evaluation of desired outcomes in all phases of the program

SOP Advisory Board

The KGI School of Pharmacy Board of Advisors represents pharmacy educators and the healthcare industry. The Board of Advisors provides input on current standards and emerging trends in practice and industry, acts as a liaison between program development and actual practice, suggests ways to achieve stated goals and directions with external constituents, assists in identifying internship and employment opportunities, and gives feedback on the effectiveness and success of activities related to program goals.

SOP Practitioner Network Council

The Practitioner Network Council (PNC) comprised of leaders in the areas of health systems, industry, government, and retail settings was established to consult with SOP concerning clinical experiential and non-traditional experiential education. The meetings and members of this council are under the oversight of the Director of Experiential Education. The PNC will act as an advisory group to SOP to assist in the recruitment and development of sites, to develop strategies to determine the value of sites and preceptors, to participate in experiential course and preceptor development, to participate in the accreditation process, and to provide feedback on improving quality.

School of Pharmacy Programs

- Doctor of Pharmacy (PharmD)

School of Pharmacy Dean and Program Directors

Derick Soo Han, Associate Professor of Biochemistry and Pharmacology, Interim Dean, School of Pharmacy. PhD, University of Southern California.

Talia Puzantian, Professor, Clinical Sciences. PharmD, University of California, San Francisco.

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School of Pharmacy Faculty

Kanika Bhandari, Assistant Professor, Clinical Sciences. PharmD, The University of Texas at Austin.

Subhrajit Bhattacharya, Assistant Professor of Pharmacology. PhD, Auburn University.

Quintin Broussard, Associate Professor, Clinical Sciences. PharmD, University of Houston.

Mostafa Elgebaly, Associate Professor of Pharmacology and Pathophysiology. PhD, University of Georgia Athens.

Oscar Garza, Professor, School of Pharmacy. PhD, University of Iowa.

Derick Soo Han, Associate Professor of Biochemistry and Pharmacology. PhD, University of Southern California.

Jeniffer Hernandez, Associate Professor of Immunology. PhD, University of California, Irvine.

Sukmanpreet Kaur, Assistant Professor, Clinical Sciences. PharmD, University of California, San Francisco.

Stephanie Kourtakis, Associate Professor, Clinical Sciences. PharmD, University of

Michigan.

John Leonard Krstenansky, Professor of Medicinal Chemistry. PhD, University of Illinois at

Chicago.

Daniel Kudo, Professor of Practice. PharmD, University of Southern California.

Jungyeon Moon, Assistant Professor, Clinical Sciences. PharmD, Western University of Health Sciences.

Puja Patel, Assistant Professor, Clinical Sciences. PharmD, St. Louis College of Pharmacy.

Talia Puzantian, Professor, Clinical Sciences. PharmD, University of California, San Francisco.

Nazia Rashid, Director of Industry Relations, Office of Experiential Education and Associate Professor of Administrative Sciences. PharmD, University of Southern California.

Greg Reardon, Associate Professor and Program Director, Pharmacy Doctorate Program. PhD, Ohio State University.

Armen Ishkhan Simonian, Associate Professor. PharmD, University of Southern California.

Martin Zdanowicz, Professor of Pharmacology. PhD, St. John’s University.

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About KGI Board of Trustees

As a private institution and a public trust, KGI is governed by an independent Board of Trustees. Members serve renewable three-year terms. This Board has the fiduciary responsibility for the long-term financial strength of KGI and for its quality. The Board of Trustees awards degrees, oversees academic policies, and appoints all corporate officers of KGI and approves their compensation.

Board of Trustees

Mohamed Abousalem, President, Keck Graduate Institute.

Bonnie Anderson, Co-founder, CEO & Chair, PinkDx, Inc.

Daniel M. Bradbury, Executive Chairman, Equillium, Inc.

Robert E. Curry, Board Chair Emeritus, KGI; Former President, PerceptiMed, Inc.

Ross A. Grossman, Former Senior Vice President, Human Resources, Regeneron Pharmaceuticals, Inc.

Maria Millan, Expert and Entrepreneur in Resident for DigitalDx Ventures.

Yolanda T. Moses, Professor of Anthropology and former Associate Vice Chancellor, Diversity and Inclusion, University of California, Riverside.

Carol A. Nacy, Founder and Chief Executive Officer, Sequella, Inc.

Ravneesh Sachdev ’06, Chief Business Officer of Portfolio Companies, Aditum Bio.

Michelle Schroeder, VP, Research & Development Strategy and Operations, Amgen.

Rahul Singhvi, Chief Executive Officer, National Resilience, Inc.

Neil Tolaney, Partner, TCV Investments.

Lydia Villa-Komaroff, Consultant of Intersections: Science, Business, Diversity.

James F. Widergren, Former CEO and President, Corgenix and ORGENTEC.

Cissy Young, Partner at Catalyst Advisors.

Trustees in Memoriam

Judy Heyboer, Human Resources Consultant; Former Senior Vice President of Human Resources, Genentech Inc.

John D. Leland, Jr., Human Resources Consultant; Former Senior Vice President of Human

Resources, Genentech Inc.

Arthur D. Riggs, Director Emeritus of the Beckman Research Institute at City of Hope.

Trustees Emeriti

John D. Baldeschwieler, Professor Emeritus, California Institute of Technology.

Dennis M. Fenton, KGI Amgen Bioprocessing Center Advisory Board Member; Principal, Fenton & Associates, LLC.

Alice S. Huang, Senior Faculty Associate in Biology and Biological Engineering, California Institute of Technology.

Howard B. Keck, Jr., President, Brighton Distributing Company.

Bernard E. Kury, Former Vice President and General Counsel, Guidant Corporation.

Richard L. McConnell, Former President, Pioneer DuPont.

William H. Rastetter, Chairman, Board of Directors, Illumina Inc.

Louis T. Rosso, Chairman Emeritus, Beckman Coulter Inc.

Jack L. Stark, President Emeritus, Claremont McKenna College.

Murli Tolaney, Chairman Emeritus, MWH Global, Inc.

Richmond Wolf, Partner, Portfolio Manager, and Investment Analyst, Capital World Investors.

KGI President and Cabinet

The President is the chief executive officer of KGI, with general oversight responsibility for academic, fiscal, physical, and disciplinary aspects of the institution. They are responsible for representing KGI to its external constituencies. The President reports to the Board of Trustees and serves at the pleasure of the Board.

The Provost provides leadership to the faculty in developing and implementing innovative and effective curricula. The Provost takes the lead role in recruiting, developing, and retaining a strong faculty, and supervises the faculty regarding teaching and research.

The Cabinet, which confers regularly on major operational, budgetary, and policy matters, is comprised of the President, the Provost and Vice President of Academic Affairs, the Vice President of Finance and Administration, the Vice President of Admissions and Enrollment Management, the Vice President of Marketing and Communications, the Vice President of Advancement, and the Assistant Vice President of Human Resources and Chief Human Resources Officer.

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President's Cabinet

Mohamed Abousalem, President. P.Eng.

Gus Buthman, Assistant Vice President and Legal Counsel. JD.

Trevor Garrett, Vice President of Finance and Administration and Chief Financial Officer. MBA.

Kenneth Mashinchi, Vice President of Marketing and Communications. MS.

Cheryl Merritt, Assistant Vice President and Chief Human Resources Officer. MS.

Daniel Montplaisir, Vice President of Advancement. MS.

Megan Prosser, Provost and Vice President of Academic Affairs. PhD.

Academic Affairs Leadership Team

Megan Prosser, Provost and Vice President of Academic Affairs. PhD.

Oscar Garza, Dean and Professor, School of Pharmacy. PhD, University of Iowa.

Angelika Niemz, Dean of Faculty and Professor. PhD.

Jeb Butler, Executive Director of Admissions and Outreach. Ed.D

Loren Martin, Associate Vice Provost of Research, Innovation, and Partnerships. PhD.

Joshua Morris, Associate Vice Provost of Educational Effectiveness and Faculty Development. PhD.

Shino Simons, Dean of Students. PhD.

Henry E. Riggs School of Applied Life Sciences

Angelika Niemz, Dean of Faculty and Professor. PhD.

School of Health Sciences

Christy Eskes, Program Director and Professor of Practice. DHSc, MPA, PA-C.

School of Pharmacy

Derick Soo Han, Interim Dean and Associate Professor. PhD

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Finance and Administration

Trevor Garrett, Vice President of Finance and Administration and Chief Financial Officer. MBA.

Erin Quillen, Assistant Vice President, Financial Operations and Business Systems. MS.

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Riggs Program Information and Graduation Requirements

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Postbaccalaureate Pre-PA Certificate (PPA) Program Sheet and Graduation Requirement

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HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Postbaccalaureate Pre-PA Certificate

PPA

The PPA certificate program is designed specifically for those looking to enhance their academic credentials to gain a competitive edge for admission into Physician Assistant programs. Students also have the opportunity to complete a master's degree during the glide year when applying to PA programs.

Highlights

Clinical experience

Students in the PPA program can earn clinical hours in the fall, spring, and summer terms

Curriculum

Graduate-level courses within the applied life sciences and combines courses in science and business

Advising support

Highly individualized support is available to all students to help navigate the PA school admissions process

Interested in a Master of Science?

Pre-health students may also pursue KGI's Master of Science in Applied Life Sciences (MS) program with a pre-health track. With this option, you take KGI's PPA curriculum in year one, and complete one of our MS concentrations in year two.

Concentrations include: Clinical research, public health, community medicine, translational research, infectious diseases, and biotechnology.

If you are interested in this option, apply for the MS program and select "Yes" when asked whether you want to apply for the pre-health track.

About the program

The PPA certificate program is highly customizable to meet the needs of each student. Curriculum consists of graduate-level courses within the applied life sciences, which includes courses in science and business. There are additional upper-level undergraduate courses offered over the summer that are often required or highly recommended by many PA programs. Options include: human anatomy with lab, human physiology with lab, and biochemistry. Students are able to take the coursework they need along with the clinical and volunteer hours necessary to become competitive for admission to PA programs.

Co-curricular learning experiences

The following is a list of some of the activities and opportunities available to PPA students:

- Field trips to local and regional PA programs
- Meet with professionals from various medical specialties
- Simulated individual interviews, group interviews, and multi-mini interviews (MMI)
- Guest speakers from various PA programs
- GRE prep course
- Networking opportunities with KGI alumni
- Research opportunities
- Clinical and shadowing opportunities
- Various community service and student club activities
- Gain up to 1,000 patient and clinical-care hours
- 2-week Medical Spanish immersion in Ensenada, Mexico

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/ppa

Contact us

Keck Graduate Institute

535 Watson Drive, Claremont, CA 91711

(909) 819-4KGI goto@kgi.edu kgi.edu

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KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

2025-26 Academic Catalog/Class of 2026 Graduation Requirements

Postbaccalaureate Pre-PA Certificate (PPA)

Students in the PPA program are required to complete a total of 24.0 credits including of 9.0 credits of required courses and 15.0 credits of general electives which may include introductory or advanced science or management courses and capstone opportunities (Team Masters Project or Independent Research).

Program Requirements

Core Requirements	Credits
PDEV 5400 Premedical Professional Development	3.0
SCI 5700 Medical Diagnostics	3.0
SCI 6100 Pharmacogenomics and Precision Medicine	3.0
Electives (May include capstone option)	15.0
Subtotal	**24.0**

Elective Courses

Elective courses available to PPA students include all the core and advanced electives courses in the MBS program. Courses may have pre-requisites. If you are thinking of returning for master's degree, then consider the options below.

Core MBS Courses	Credits
SCI 5000 Molecular Biotechnology	1.5
ENG 5160 Introduction to Bioprocessing	1.5
SCI 5300 Pharmaceutical Discovery	1.5
SCI 5310 Pharmaceutical Development	1.5
PDEV 5220 Bioindustry Ethics and Society	1.5
BUS 5100 Finance and Accounting Principles	1.5
BUS 5110 Corporate Finance	3.0
BUS 5300 Competitive Strategy	3.0
BUS 5000 Intro to Bioscience Industries	3.0
REG 5000 Intro to US Food and Drug Law	1.5

Business Courses	Credits
BUS 6600 Business Operations	3.0
BUS 6410 Leadership in Organizations	3.0
BUS 6400 Organizational Behavior	3.0
BUS 5200 Healthcare Economics	3.0
BUS 6310 International Business	3.0
BUS 6500 Marketing Management	3.0
BUS 6320 Managing Strategic Alliances	3.0
BUS 6710 Biotechnology Entrepreneurship	3.0
BUS 6730 Applied Entrepreneurship	3.0
MATH 6510 Marketing Analytics	1.5
BUS 6330 Intellectual Property Strategy	1.5
BUS 6120 Valuation in Applied Life Science	1.5
BUS 6220 Drug Pricing and Reimbursement	1.5

KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Technical Courses	Credits
SCI 6310 Biotechnolgy-Based Theraputics	3.0
SCI 6311 Molecular Basis of Disease	3.0
ENG 6310 Drug Delivery Devices	1.5
ENG 6320 Biosensors	1.5
SCI 6100 Pharmacogenetics and Precision Medicine	3.0
SCI 6700 Advanced In Vitro Diagnostics	3.0
SCI 6710 Technologies for Biomarker and Drug Discovery	1.5
ENG 5121 Microbial Fermentation Laboratory	1.5
MATH 5140 Bioinformatics in R	1.5
Math 5110 Biosignal Processing	1.5
REG 5311 Biopharmaceutical Quality Assurance and Control	1.5
REG 5312 Chemistry, Manufacturing, and Controls Regulation of Pharmaceuticals	1.5
ENG 5120 Microbial Fermentation	1.5
ENG 5131 Mammalian Cell Culture Lab	3.0
ENG 5141 Introduction to Bioseparations Engineering Lab	1.5
ENG 6340 Product Development	3.0
ENG 5130 Mammalian Cell Biotechnology	1.5
ENG 5140 Bioseparations Engineering and Science	1.5
SCI 6300 Advanced Pharmaceutical Discovery	3.0
ENG 5100 Bioprocess Engineering Principles	1.5
REG 6510 Clinical Trials Design, Conduct and Strategy	1.5
MATH 5020 Clinical Biostatistics	3.0
REG 6120 Medical Device Regulations	1.5
SCI 5210 Clinical Pharmacology I	3.0
SCI 5220 Clinical Pharmacology II	3.0
REG 6110 Drug and Biologic Regulations	1.5
REG 6020 Current Issues for FDA Regulated Products	3.0

Technical or Business Depending on Topic	Credits
RES 6000/6001 Independent Research	1.5 or 3.0
RES 6010/6011 Independent Study	1.5 or 3.0

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Postbaccalaureate Premedical Certificate (PPC) Program Sheet and Graduation Requirement

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HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Postbaccalaureate Premedical Certificate

PPC

The Postbaccalaureate Premedical Certificate is a versatile one-year academic enrichment certificate program designed to help students gain a competitive edge for admission to medical school through a rigorous graduate interdisciplinary curriculum of applied life science courses. Students also have the option to complete a master's degree while applying to medical schools.

Highlights

Advising support

Highly individualized support is available to all students to help navigate the medical school admissions process

Curriculum

Graduate-level courses within the applied life sciences and combines courses in science and business

Co-curricular activities

Designed to prepare students for successful applications with an emphasis on networking, mock interviews, shadowing opportunities, and field trips

Interested in a Master of Science?

Pre-health students may also pursue KGI's Master of Science in Applied Life Sciences (MS) program with a pre-health track. With this option, you take KGI's PPC curriculum in year one, and complete one of our MS concentrations in year two.

Concentrations include: Clinical research, public health, community medicine, translational research, infectious diseases, and biotechnology.

If you are interested in this option, apply for the MS program and select "Yes" when asked whether you want to apply for the pre-health track.

About the program

The Postbaccalaureate Premedical Certificate program is highly customized to meet the needs of each student. With just three mandatory courses (medical diagnostics, medical devices, and premedical professional development), students take a highly personalized schedule of classes to become competitive. After completing the certificate, students may apply to AMCAS or AACOMAS and/or pursue employment opportunities in the life sciences industry.

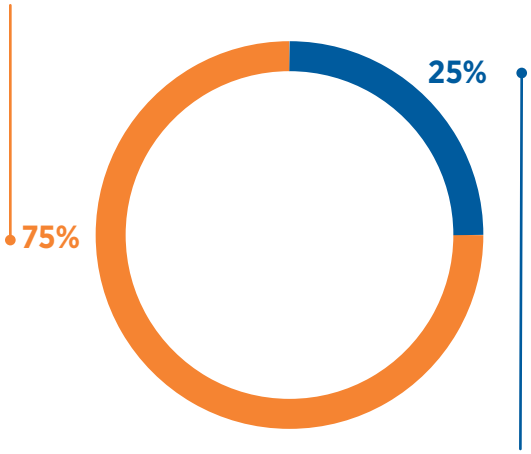
Co-curricular learning experiences

The following is a list of some of the activities and opportunities available to PPC students:

- MCAT Review course (additional fee required)
- Field trips to local and regional medical schools
- Meet with professionals from various medical specialties
- Simulated individual interviews, group interviews, and multi-mini interviews (MMI)
- Volunteer at local Pomona Free Clinic
- Guest speakers from various medical schools
- Networking opportunities with KGI alumni
- Research opportunities
- Clinical and shadowing opportunities
- Medical scribe at nearby clinics in underserved communities
- Mentor to nearby K-12 schools
- Local community programs such as Casa Colina Hospital and Centers for Healthcare, K-12 tutoring, and Diabetes Free Riverside Project
- 2-week Medical Spanish immersion in Ensenada, Mexico

Success rate

Percentage of KGI PPC alumni who matriculate into medical school



Percentage of KGI PPC alumni who matriculate into dental school, podiatric medicine, PhD programs, PA programs, and full-time employment in the biotech/life sciences industry

Career options

- Medical school (MD/DO)
- Graduate school (PhD)
- Dental school (DDS, DMD)
- Public health (MPH)
- Community medicine
- Pharmacy school (PharmD)
- Industry-related employment
- Optometry School (OD)

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/ppc

Contact us

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Revised 03/04/25

KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

2025-26 Academic Catalog/Class of 2026 Graduation Requirements

Postbaccalaureate Premedical Certificate (PPC)

Students in the PPC program are required to complete a total of 24.0 credits consisting of 9.0 credits of required courses and 15.0 credits of general electives which may include introductory or advanced science or management courses and Capstone opportunities (Team Masters Project or Independent Study/Independent Research).

Program Requirements

Core Requirements	Credits
SCI 5700 Medical Diagnostics	3.0
ENG 5300 Medical Devices	3.0
PDEV 5400 Premedical Professional Development	3.0
Electives (May include capstone option)	15
Subtotal	**24.0**

Elective Courses

Elective courses available to PPC students include all the core and advanced electives courses in the MBS program. Courses may have pre-requisites. If you are thinking of returning for master's degree, then consider the options below.

Core MBS Courses	Credits
SCI 5000 Molecular Biotechnology	1.5
ENG 5160 Introduction to Bioprocessing	1.5
SCI 5300 Pharmaceutical Discovery	1.5
SCI 5310 Pharmaceutical Development	1.5
PDEV 5220 Bioindustry Ethics and Society	1.5
BUS 5100 Finance and Accounting Principles	1.5
BUS 5110 Corporate Finance	3.0
BUS 5300 Competitive Strategy	3.0
BUS 5000 Intro to Bioscience Industries	3.0
REG 5000 Intro to US Food and Drug Law	1.5

Business Courses	Credits
BUS 6600 Business Operations	3.0
BUS 6410 Leadership in Organizations	3.0
BUS 6400 Organizational Behavior	3.0
BUS 5200 Healthcare Economics	3.0
BUS 6310 International Business	3.0
BUS 6500 Marketing Management	3.0
BUS 6320 Managing Strategic Alliances	3.0
BUS 6710 Biotechnology Entrepreneurship	3.0
BUS 6730 Applied Entrepreneurship	3.0
MATH 6510 Marketing Analytics	1.5
BUS 6330 Intellectual Property Strategy	1.5
BUS 6120 Valuation in Applied Life Science	1.5
BUS 6220 Drug Pricing and Reimbursement	1.5

Technical Courses	Credits
SCI 6310 Biotechnolgy-Based Theraputics	3.0
SCI 6311 Molecular Basis of Disease	3.0
ENG 6310 Drug Delivery Devices	1.5
ENG 6320 Biosensors	1.5
SCI 6100 Pharmacogenetics and Precision Medicine	3.0
SCI 6700 Advanced In Vitro Diagnostics	3.0
SCI 6710 Technologies for Biomarker and Drug Discovery	1.5
ENG 5121 Microbial Fermentation Laboratory	1.5
MATH 5140 Bioinformatics in R	1.5
Math 5110 Biosignal Processing	1.5
REG 5311 Biopharmaceutical Quality Assurance and Control	1.5
REG 5312 Chemistry, Manufacturing, and Controls Regulation of Pharmaceuticals	1.5
ENG 5120 Microbial Fermentation	1.5
ENG 5131 Mammalian Cell Culture Lab	3.0
ENG 5141 Introduction to Bioseparations Engineering Lab	1.5
ENG 6340 Product Development	3.0
ENG 5130 Mammalian Cell Biotechnology	1.5
ENG 5140 Bioseparations Engineering and Science	1.5
SCI 6300 Advanced Pharmaceutical Discovery	3.0
ENG 5100 Bioprocess Engineering Principles	1.5
REG 6510 Clinical Trials Design, Conduct and Strategy	1.5
MATH 5020 Clinical Biostatistics	3.0
REG 6120 Medical Device Regulations	1.5
SCI 5210 Clinical Pharmacology I	3.0
SCI 5220 Clinical Pharmacology II	3.0
REG 6110 Drug and Biologic Regulations	1.5
REG 6020 Current Issues for FDA Regulated Products	3.0

Technical or Business Depending on Topic	Credits
RES 6000/6001 Independent Research	1.5 or 3.0
RES 6010/6011 Independent Study	1.5 or 3.0

KECK GRADUATE INSTITUTE
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Master of Biotechnology Management (MBM) Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

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HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Biotechnology Management

MBM

The Master of Biotechnology Management is designed to provide graduates with MBA-level management skills customized to the bioscience industries. The program is fully online and designed to be convenient to the working professional. The program is designed using stackable specialty certificates. The skills you need can be personalized to your career goals.

Highlights

MBA level courses

MBA-level courses with an emphasis on the bioscience industries.

Focused

Core courses focused on bioscience management, strategy and finance combined with stackable certificates and elective courses in areas of interest to participants.

- Certificate in Bioscience Management
- Certificate in Leadership
- Certificate in Healthcare Economics
- Certificate in Regulatory Affairs
- Certificate in Supply Chain Management
- Certificate in Innovation
- Certificate in Marketing
- Certificate in MDD Engineering

Custom capstone project

Ability to create a custom capstone project in an area of interest to each participant. Can be a consulting project with a bioscience company.

Who should apply

- **Life science professionals** with experience in the life sciences and a strong interest in gaining bioscience-oriented management skills.
- **Advance your career**: Technical personnel looking to move into supervisory roles (e.g., individuals working as laboratory research associates), biomanufacturing processes, quality/CMC, or other areas.
- **Transition your career:** Professionals, scientists, postdoctoral fellows or PhD students looking to develop careers in the bioscience industry.

Career areas

- Entrepreneur - Founder of a business
- Research Scientist
- Project Manager
- Consultant
- Business Development
- Product Management
- Clinical Affairs

Features

- **100% online**: Courses use a blended teaching method that combines flexible asynchronous learning with interaction team collaboration sessions.
- **Specialized**: Stackable certificates with variety of specialties such as healthcare economics, regulatory affairs, innovation, leadership, MDD engineering, supply chain operations and marketing.
- **Industry focused**: Courses designed to meet the needs of professionals in the biotech industry.
- **Expert faculty**: Instructors bring real-world insights to the classroom.

Benefits

- **Management courses**: A unique blend of business skills focused on the intricacies of the life science industry to prepare individuals for managerial roles.
- **Network**: Extensive network of alumni, fellow professionals and industry partners through events, activities and fostering relationships that can enhance your career.
- **Enhanced skillset**: Developing additional skills enhances your resume, career possibilities and has shown to foster increased salaries.
- **Professional growth:** Individuals with 5+ years of bioscience industry experience looking to move into commercially oriented roles within companies (e.g., business development, competitive intelligence, marketing) or develop careers as life-science oriented consultants.

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.link/mbm

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KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

2025-26 Academic Catalog/Class of 2026 Graduation Requirements

Master of Biotechnology Management (MBM)

The MBM curriculum is designed to for life science professionals with work experience or additional education in the life sciences and a strong interest in gaining bioscience-oriented management skills. Students in the MBM program complete a minimum of **30.0 credits**, comprising of individual stackable certificates, elective courses, and a capstone project. The courses are typically taken part time over the course of 2 or more years, allowing flexibility for working professionals.

Available Certificates

Available Certificates and Capstone	Credits	Required Credits
Certificate in Bioscience Management (required)	9	9
Certificate in Healthcare Economics	6	Must complete two certificates (12 credits) plus 6 elective credits = 18 total
Certificate in Regulatory Affairs	6	
Certificate in Leadership	6	
Certificate in Supply Chain Operations	6	
Capstone Project (Required)	3	3
	Total	**30**

Other certificates are in development and will be offered in the coming years.

Program Curriculum

Student will take online asynchronous courses to obtain MBA-level management skills customized to the bioscience industries. Students will pursue the following courses and certificates:

Certificate in Bioscience Management (required)	Credits
BUS 5000 Introduction to Bioscience Industries (FS)	3
BUS 5110 Corporate Finance (SS)	3
BUS 5300 Competitive Strategy (SS)	3
	9

Certificate in Healthcare Economics	Credits
BUS 5200 Healthcare Economics (FS)	1.5
BUS 6210 Advanced Healthcare Economics (S1)	1.5
BUS 6220 Drug Pricing and Reimbursement (S2)	1.5
Fundamentals of Medical Affairs (S2)	1.5
	6

Certificate in Regulatory Affairs	Credits
REG 5000 Introduction to US Food and Drug Law (F1)	1.5
REG 6110 Drug and Biological Regulations (F2)	1.5
REG 6120 Medical Device Regulations (S1)	1.5
International Regulations (S2)	1.5
	6

Certificate in Leadership	Credits
BUS 6400 Organizational Behavior (FS)	3
MSCM 5601 Motivation, Change, and Leadership (FS)	3
	6

Certificate in Supply Chain and Operations	Credits
BUS 6610 Supply Chain and Biotech Operations (SS)	3
BUS 6600 Business Operations (FS)	3
	6

In addition, students will enroll in **PDEV 5030 MBM Capstone Project (3 credits)**, either in the fall or spring semester. The capstone provides students with a comprehensive, hands-on opportunity to engage in real-world problem-solving within a company setting. Students will identify a project in a life science company that may involve business, regulatory, technical, or clinical aspects, or a combination of these components.

Academic Petitions

The Program Director and Academic Dean must sign a petition for certain requests, such as:

- Exceptions to registration deadlines (i.e., late add/drop)
- Variances in cross-registration and general education requirements
- Exceptions to graduation requirements or other KGI academic policies

Please see the Academic Petitions page for more information. To fill out an Academic Petition, click here.

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Master of Business and Science (MBS) Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

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HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Business and Science

MBS

KGI's two-year MBS program prepares graduates for exciting careers in the bioscience industries. The program integrates graduate level courses in science and bioscience management. Students have opportunities to work with biotech, pharmaceutical, and healthcare companies, preparing them for influential careers and leadership positions in industry.

Highlights

Hands-on MBS learning

The world-class curriculum combines technical knowledge and business acumen in small, highly interactive classes

Biotechnology industry connection

Students work closely through company-sponsored projects and faculty with strong ties to the field

KGI's MBS job placement

Over 90% of graduates land a job in the industry within 6 months

Team Master's Project | TMP

Few other schools offer students the real world practice KGI students gain during the TMP, in which teams of three to five students work with sponsoring companies in a year-long consulting assignment to solve real problems. Students form interdisciplinary teams and work with faculty, business, and industry advisors to perform contract research. The projects include both business and technical aspects. Student teams create budgets, develop timelines, and describe deliverables. At the end of the academic year, they present a report of their work at the company and KGI.

What can I do with this degree?

We measure the success of our program by the success of our alumni, and we are proud to share our record of achievement.

90%

Over 90% of alumni placed in industry within six months of graduation.

$240,000

Average salary five years post graduation is over $240,000.

MBS INITIAL JOB PLACEMENTS, 2018-2021*

Business (all categories)	**46%**
Clinical/regulatory affairs	**26%**
Consulting	**19%**
Operations/supply chain	**14%**
Business (miscellaneous)**	**12%**
Sales/marketing/business development	**8%**
Project management	**6%**
Scientist	**6%**
Engineer	**3%**

*Known initial placements as reported by LinkedIn. Excludes 11% of students seeking additional graduates degrees such as MD, DO, PhD

**Includes business analyst, strategy, finance, entrepreneur.

About the program

The MBS is a two-year residential program that integrates interdisciplinary instruction in translational science, business, and regulatory affairs. The program emphasizes industry experiences throughout the curriculum, both within courses and directly.

Year 1

- Bioscience business courses in strategy, corporate finance, bioscience industry dynamics, and data analytics.
- Translational science courses in drug discovery and development, bioprocessing, medical devices, and medical diagnostics.
- Professional development course including skills workshops and industry talks.

Summer

- Real-world experience during required industry internship
- Launching point into future careers

Year 2

Industry experience through the Team Master's Project. Focused studies through one of four career-oriented concentrations:

1. Biotech Management
2. Operations and Supply Chain Management
3. Regulatory Affairs
4. Data Analytics

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/mbs

Contact us

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Revised 03/04/25

Master of Business & Science (MBS)

To earn the MBS degree, students are required to complete the following coursework:

- Core curriculum (25.5 credits)
- TMP (12.0 credits)
- Other courses to total 48 credits (average 12.0 credits/semester)
- 400-hour, paid, industry internship in the summer following their first year approved by KGI Career Services and an internship poster reviewed by KGI faculty.

MBS Students may also complete an optional 9 credit Concentration during their second year.

Year 1 Core Curriculum

Fall Courses	Credits
BUS 5000 Intro. to Bioscience Industries	3.0
BUS 5500 Business Research Design and Analytics in Life Sciences	3.0
SCI 5300 Pharmaceutical Discovery	1.5
SCI 5310 Pharmaceutical Development	1.5
SCI 5700 Medical Diagnostics	3.0
PDEV 5100 Professional Development	0.0
Subtotal	**12.0**

Spring Courses	Credits
BUS 5110 Corporate Finance	3.0
BUS 5300 Competitive Strategy	3.0
ENG 5160 Introduction to Bioprocessing	1.5
ENG 5300 Medical Devices	3.0
REG 5000 Intro. to US Food and Drug Law	1.5
Subtotal	**12.0**

Year 2 Course Requirements

- *Fall TMP*: PDEV 6000: Team Master's Project (6.0)
- *Spring TMP*: PDEV 6000: Team Master's Project (6.0)
- *Spring*: PDEV 5240 Life Science Industry Ethics (1.5)

Independent Study/Independent Research

Independent research (RES 6000, 6001) and independent study (RES 6010, 6011) are conducted under the supervision of one or more faculty members.

Students may enroll in 1.5 or 3.0 credits per semester. No more than 3.0 credits of IS/IR will count toward graduation for all MBS students.

To enroll in IS/IR, the student must complete the Independent Study/Research Contract and return it to the Registrar's Office before the last day to Add courses. Independent study is acquiring skills, knowledge, or information that is known among professionals; independent research is work that generates novel techniques, knowledge, or synthesis of information.

Other Policies

Electives. During the second year MBS students may enroll in most Riggs School course that are not part of the MBS core curriculum for elective credit. Note however that some courses may have prerequisites or require instructor permission to enroll.

Courses in Other KGI Schools. Students may submit an academic petition to count GENE or PHARM courses taught within the School of Pharmacy and Health Sciences may for credit towards the MBS degree. PHAR 7563: Fundamentals of Medical Affairs (1.5 credits) and GENE 5120 Bioinformatics in Python (1.5) may be taken for elective credit without petition.

Concentrations. Students are encouraged (but not required) to designate a career-specific concentration. Each concentration requires completing a total of 9 credits of required and elective courses, as shown on the following pages. With permission of the Program Director, up to 3.0 elective credits for independent research or study can be counted as a concentration elective, if the topic is directly related to the concentration.

CGU/Drucker Courses. Students may substitute up to four credits at CGU (including Drucker) to count as up to three KGI credits; this is the maximum number of credits that can be applied to meet any graduation requirements. In most cases, prerequisites for Drucker courses cannot be waived or substituted. Students may submit an academic petition to count a CGU/Drucker course for the elective portion of a Concentration, so long as the course is in the area of the Concentration. **All registration for Drucker courses must originate with the KGI registrar; do not directly contact the Drucker instructor or registrar.**

Safety Training. he completion of KGI laboratory safety training is required for students who take specific laboratory classes.

Academic Petitions

The **Program Director and Academic Dean** must sign a petition for certain requests, such as the following:

- Course overload: permission to take more than 18 credits.
- MBS students requesting part-time status (less than 12 credits/semester)
- Exceptions for course prerequisites (also requires instructor approval)
- Exceptions to registration deadlines (late Add or Drop)
- Exceptions to cross registration and general education requirements
- Substitution for a required or elective concentration course, including counting independent study or independent research towards as a concentration elective
- Exceptions to graduation requirements or other KGI academic policies

Request for course exceptions or substitutions should be submitted in advance. Please follow the instructions for Academic Petitions on the Registrar's "Forms and Documents" page.

MBS Concentrations

Required and elective classes*

Operations and Supply Chain Management (6+3)

BUS 6600: Business Operations (3.0)
BUS 6610: Supply Chain Biotech Operations (3.0)

Electives (3 credits from the following)
ENG 5100: Bioprocess Engineering Principles (1.5)
ENG 5132: Introduction to Upstream Processing (1.5)
ENG 5140: Bioseparations Engineering and Science (1.5)
ENG 5141: Introduction to Bioseparations Engineering Lab (1.5)
ENG 6350: Medical Device Production (3.0)
REG 5310: Quality Systems and Regulation for Biologics (1.5)
REG 6320 Advanced Regulatory Topics for Biologics (1.5)

BTM: Biotech Management (6+3)

BUS 6400: Organizational Behavior (3.0)
BUS 6500: Marketing Management (3.0)

Electives (3 credits from the following)
BUS 6120: Valuation in the Life Sciences (1.5)
BUS 5200: Healthcare Economics (1.5)
BUS 6210: Advanced Healthcare Economics (1.5)
BUS 6220: Drug Pricing and Reimbursement (1.5)
BUS 6230: Global Health Policy (1.5)
BUS 6310: International Business (1.5)
BUS 6510: Design Thinking (1.5)
MATH 6510: Marketing Analytics (1.5)
BUS 6330: Intellectual Property Strategy (1.5)
BU*S 6710: Biotechnology Entrepreneurship (1.5)

Regulatory Affairs (6+3)

REG 5310: Quality Systems and Regulation for Biologics (1.5)
REG 6110: Drug and Biologic Regulations (1.5)
REG 6120: Medical Device Regulations (1.5)
REG 6510: Design of Clinical Trials (1.5)

Electives: 3 credits from the following
ENG 6350: Medical Device Production (3.0) *(May be substituted for REG 5310)*
MATH 5020: Clinical Biostatistics (3.0)
REG 6020: Current Issues for FDA Regulated Products (1.5)
REG 6320: Advanced Regulatory Topics for Biologics (1.5)
REG 6520: Clinical Trial Design and Literature Evaluation (3.0)
SCI 6310: Biotechnology-Based Therapeutics (3.0)

Data Analytics (3+6)

MATH 5100 Data Analytics in Python (1.5)
MATH 6510 Market Analytics (1.5)

Electives: 6 credits from the following:
MATH 5020: Clinical Biostatistics (3.0)
MATH 5300: Machine Learning in the Life Sciences (1.5)
GENE 5120: Bioinformatics in Python (1.5)
GENE 5130: Bioinformatics in R (1.5)
MATH 5220: Data Analytics in R (1.5)

*Note: Some electives are not offered every year.

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Master of Community Health Administration (MCHA) Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

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HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Community Health Administration

MCHA 100% Online (Asynchronous)

The Master in Community Health Administration (MCHA) program is for those seeking to advance their career while aiding underserved communities.

This online program is available full-time or part-time, making it easy to balance your studies with existing commitments. When you graduate, you'll possess the expertise needed to improve patient outcomes in the communities you serve.

The curriculum blends business acumen with community medicine, exploring several key subject areas including healthcare economics, healthcare leadership, and effective health system management.

What do you get when studying at KGI?

Razor-sharp business acumen

You will master the interplay between business and medicine, ensuring you graduate with critical expertise in healthcare economics, finance, and systems management.

Team leadership

Success in health administration is impossible without impeccable leadership. To that end, you'll hone critical skills that amplify your ability to manage complex teams.

Transformative care

A hands-on capstone project allows you to work in your own local area to obtain real-world experience in the practice of transformative, community-based care.

Why Choose KGI for Your MCHA Program?

Because you want to be a leader in public health—the kind of professional equipped to thrive anywhere you work, be it a community clinic, local health program, Federally Qualified Health Center (FQHC), or some other healthcare organization.

Choose KGI if you're looking for:

- Financial support in the form of full and partial scholarships.
- Flexible, dynamic learning that adapts to your existing obligations.
- Faculty members with real-world experience (not just life-long academics).
- Hands-on coursework to aid your mastery of healthcare problem identification, response, and management.
- Rapid career advancement and an increase in your earnings (graduates from KGI's MCHA program average starting salary is $100,000).

Should you apply?

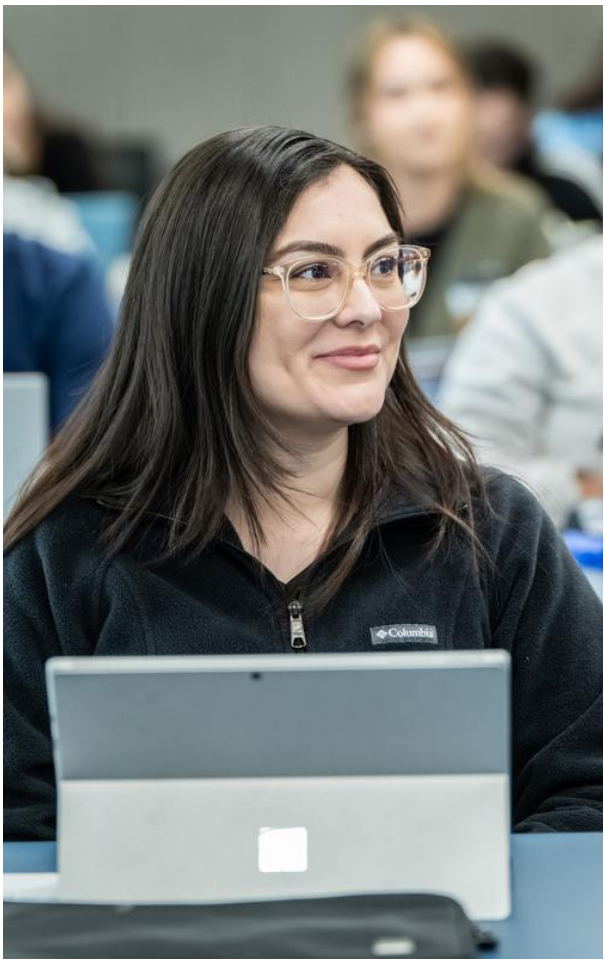
Yes! Especially if you are a:

- Working medical professional looking to advance your career and move into management.
- Medical student looking to enhance your leadership and community care skills.
- Seasoned administrator striving to improve your business acumen as it relates to healthcare.

What can you do with your degree?

When you graduate with your Master of Community Health Administration, there's no shortage of jobs you can pursue. While KGI's MCHA graduates go into several different professions, some of the most common career paths include:

- Healthcare administrator
- Public health director
- Clinical administrator
- Program manager
- Nonprofit healthcare executive
- Health consultant
- Healthcare policy analyst



Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit pce.kgi.edu/mcha

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KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

2025-26 Academic Catalog/Class of 2026 Graduation Requirements

Master of Community Health Administration (MCHA)

The Master of Community Health Administration (MCHA) program requires students to complete 33.0 credits through either full-time or part-time study. The curriculum consists of asynchronous didactic courses and hands-on practical experience gained through a Community Engagement Capstone Project.

Out of the total 33.0 credits, 27.0 credits are earned through four specialized certificates and a 6.0-credit Community Engagement Capstone Project.

Program Requirements

Certificate and Capstone Project	Credits
Community Health	9.0
Health Systems	6.0
Healthcare Economics	6.0
Leadership	6.0
Community Engagement Capstone Project	6.0

Program Curriculum

The MCHA curriculum is designed to provide students with a comprehensive understanding of community healthcare and enhance their leadership and management skills specifically for the healthcare sector. This is accomplished by completing four specialized certificates in areas related to the healthcare industry. The four (4) certificates that Master of Community Health Administration students will pursue are:

Community Health Certificate	Credits
MSCM 5001 (FA) Infectious Diseases and Community Health	3.0
MSCM 5002 (SP) Chronic Diseases and Community Health	3.0
MSCM 5302 (SP) Community Health Challenges	3.0

Health Systems Certificate	Credits
MSCM 5105 (SP) Health Systems Sciences	3.0
MSCM 5501 (FA) Direct to Community Healthcare	3.0

Health Economics Certificate	Credits
BUS 5200 (FA) Healthcare Economics	1.5
BUS 6220 (SP) Drug Pricing & Reimbursement AND/OR	1.5
BUS 6210 (SP) Advanced Healthcare Economics	1.5
Health Economics Elective (Choose one, 1.5 credits required)	
— **REG 5000** (FA) Introduction to US Food and Drug Law	1.5
— **BUS 5000** (FA) Introduction to Bioscience Industries	3.0
— **BUS 5110** (SP) Corporate Finance	3.0

Note: MCHA students must complete a 1.5-credit elective course in Health Economics. Students are encouraged to consult with the MCHA program director for assistance in selecting the elective course, as not all electives are offered every year. Please refer to the Henry E. Riggs School of Applied Life Sciences course list for course information.

Leadership Certificate	Credits
BUS 6400 (FA) Organizational Behavior	3.0
MSCM 5601 (FA) Motivation, Change, and Leadership	3.0

Community Engagement Capstone Project

All MCHA students are required to complete a total of 6 credits of the Community Engagement Capstone Project in their local community. Students have **two options** for completing their capstone project.

Community Engagement Capstone	Credits
OPTION 1: Requires a commitment of at least **9 hours per week** over two semesters.	
— **MSCM 5997** (FA) Community Engagement Capstone Project AND	3.0
— **MSCM 5997** (SP) Community Engagement Capstone Project	3.0

Community Engagement Capstone	Credits

OPTION 2: Requires a commitment of at least **18 hours per week** within one semester.

- **MSCM 5998** (FA or SP) Community Engagement Capstone Project 6.0

Note: All students must present their capstone research at the **Riggs Research Symposium** or **Virtual Oral Presentation Day**, held in the Spring following the completion of their capstone project (the specific date will be announced).

Capstone Project Approval Process:

- Students must secure their capstone project and receive approval from the MCHA program director no later than **two weeks before the semester starts**.
- A Capstone Contract must be submitted to register for the Capstone Engagement course.

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Master of Engineering in Biopharmaceutical Processing (MEng)
Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

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HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Engineering in Biopharmaceutical Processing

MEng

This two-year program transforms students with STEM backgrounds into the Bioprocess Engineers employed by companies like Amgen, Gilead, and Pfizer. Unlike other universities where there's an over-emphasis on traditional learning methods, the hands-on instruction you receive at KGI is a catalyst for career growth in the biopharmaceutical and biotechnology industries.

What kind of projects will you work on?

Team Master's Project (TMP)

As a first-year student, you will work in an interdisciplinary team under the guidance of both professional and academic advisors. Recent Team Master's Project sponsors include **Alphinity**, **Amgen**, **Boehringer Ingelheim**, **Gilead**, **Orbilion Bio**, and **Pfizer**.

Team Design Project (TDP)

As a capstone effort for second-year students, the Team Design Project is where you design a complete biomanufacturing process that produces commercial quantities of biologics in accordance with industry-standard practices.

In-depth research

Depending on your personal interests, you will join different research teams studying critical components of the biopharmaceutical and biotech industries, including Monoclonal antibodies, viral vectors, stem cells, pDNA, data analytics, and more.

What do you get when studying at KGI?

Active, hands-on learning

You will do more than attend lectures and read textbooks—you will immerse yourself in active, hands-on learning that incorporates a combination of laboratory coursework and real-world internships.

Corporate networking

As an MEng student at KGI, you will be connected to a powerful, influential network of professionals through the Amgen Bioprocessing Center Advisory Board.

100% job placement

The MEng program maintains a 100% job placement rate with the top names in the biopharmaceutical and biotech industries.

What can you expect in your two-year program?

Year 1

- Foundational coursework in engineering, science, quality control, regulatory compliance, and general business
- In-depth classes and laboratory work related to bioprocessing
- Participation in an industry-sponsored Team Master's Project (TMP)
- A paid summer internship

Year 2

- Advanced coursework related to bioprocessing
- Participation in the capstone Team Design Project (TDP)

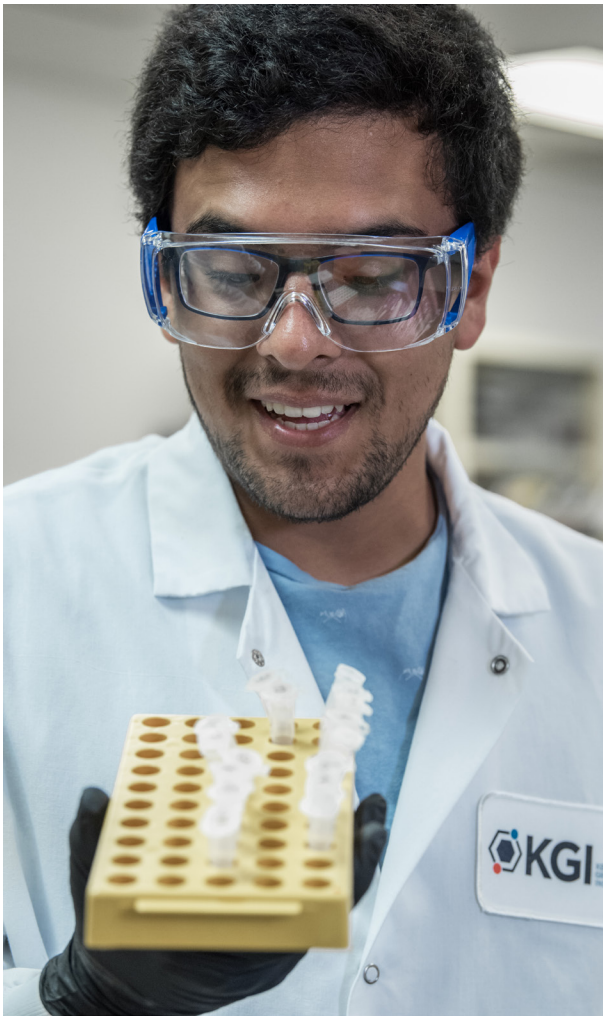
Who's hiring graduates from KGI?

- Abzena
- Allogene
- Ambrx
- Amgen
- Astra Zeneca
- Atara Bio
- ATUM
- Avid Bioservices
- BioMarin
- Boeringer Ingelheim
- Catalent
- Celltheon
- FDA
- Genentech
- General Electric
- GenVivo
- Gilead
- Just Evotec Biologies
- Kite
- Pfizer
- Repligen
- Sanofi
- Sartorius
- Takeda
- ThermoFisher Scientific
- Upside Foods
- And many more.

What can you do with your degree?

When you graduate with your Master of Engineering in Biopharmaceutical Processing, there's no shortage of jobs you can pursue. While KGI's MEng graduates go into several different professions, some of the most common career paths include:

- Process development scientist and engineer
- Quality/regulatory scientist
- Manufacturing science and technology (MSAT) specialist
- Process design engineer
- Process technology transfer and validation specialist
- Field application scientist/engineer
- Project management
- 100% job placement for graduates
- $90,000 average starting salary for graduates



Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/meng

Contact us

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Revised 03/04/25

KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

2025-26 Academic Catalog/Class of 2027 Graduation Requirements

Master of Engineering in Biopharmaceutical Processing (MEng)

Students in the MEng program are required to complete a minimum of **60 Credits** over the course of two years of study.

- Biopharmaceutical Processing (12 credits)
- Biopharmaceutical Processing Labs (7.5 credits)
- Biopharmaceutical Capstone - Team Design Project (12 credits)
- Quality and Regulatory (3 credits)
- Other Business, Science courses (25.5 credits)

Students are also required to complete a 400-hour, paid, industry internship in the summer following their first year, and present an internship poster reviewed by KGI faculty/stuff. Students also need to complete PDEV 5100 (Professional Development – 0 credit) course prior to the internship.

Program Requirements

Fall 1st Year Courses	Credits
ENG 5153 Engineering Fundamentals for Bioprocessing**	3
SCI 5500 Introduction to Biology and Biochemistry*	
ENG 5100 Bioprocess Engineering Principles	1.5
ENG 5132 Introduction to Upstream Processing	1.5
MATH 5100 Data Analytics in Python	1.5
ENG 5151 Vector & Strain Design LAB	1.5
ENG 5110: Statistical Methods and Experimental Design in Bioprocessing	1.5
BUS 5000 Introduction to Bioscience Industry	3
PDEV 5000 Team Master's Project	3
Subtotal	**16.5**

Spring 1st year Courses	Credits
ENG 5133 Introduction to Upstream Processing LAB	1.5
ENG 5140 Bioseparations Engineering and Science	1.5
ENG 5141 Introduction to Bioseparations Engineering Lab	1.5
ENG 5142 Advanced Bioseparations Engineering Lab	1.5
ENG 5134 Advanced Upstream Processing LAB	1.5
MATH 5300 Machine Learning in the Life Sciences	1.5
REG 5310 Quality Systems and Regulation for Biologics	1.5
SCI 6311 Cell-Produced Therapeutics	1.5
PDEV 5000 Team Master's Project	3
Subtotal	**15.0**

* Requirement for students with ENG background (assigned by MEng Program Director based on transcript)
** Requirement for students with SCI background (assigned by MEng Program Director based on transcript)

Program Requirements

Fall 2nd Year Courses	Credits
ENG 6100 Team Design Project (TDP)	6
ENG 6132 Advanced Upstream Processing	1.5
ENG 6140 Advanced Bioseparations Engineering	1.5
SCI 6401 Fundamental Papers in Molecular Biology and Biotechnology	1.5
REG 6310 Advanced Quality Topics for Biologics	1.5
ENG/MATH/SCI/RES #### or TMP (PDEV 5000) Technical Elective (Can be opted either in Fall and/or in Spring semesters)	0-1.5[$]
BUS #### Elective (Can be opted either in Fall and/or in Spring semesters – total 3 credits)[$]	0-3[$]
Subtotal	**12.0 - 16.5**

Spring 2nd Year Courses	Credits
ENG 6100 Team Design Project (TDP)	6
ENG 6152 Bioprocessing for Emerging Therapeutics	1.5
BUS 5110 Corporate Finance	3
PDEV 5240 Life Sciences Industry Ethics	1.5
ENG/MATH/SCI/RES #### or TMP (PDEV 5000) Technical Elective (Can be opted either in Fall and/or in Spring semesters)	0-1.5
BUS #### Elective (Can be opted either in Fall and/or in Spring semesters – total 3 credits)[$]	0-3[$]
Subtotal	**12.0 - 16.5**

[$] All MEng students must complete Business Elective Courses worth 3 credits from list below in Fall and/or Spring semester. They also must complete a Technical Elective course worth 1.5 credit either in Fall or in Spring semester in consultation with the Faculty Advisor and the MEng Program Director. Some suggested electives are listed below.

Electives

2nd Year BUS ELECTIVES	Credits
BUS 6710 Biotechnology Entrepreneurship	1.5
BUS 6410 Leadership in Organizations	1.5
BUS 6400 Organizational Behavior	3
BUS 6600 Business Operations	3
BUS 6500 Marketing Management	3
BUS 6610 Supply Chain Biotech Operations	3
BUS 6220 Drug Pricing and Reimbursement¶	1.5
MATH 6510 Market Analytics¶	1.5

2nd Year ENG/MATH/SCI ELECTIVES	Credits
RES 6010 Independent Study	1.5-3
RES 6001/6000 Independent Research	1.5-3
PDEV 6000 Team Master's Project (TMP)	3
REG 6320 Advanced Regulatory Topics for Biologics	1.5

(¶) Course has Pre-requisites not part of MEng curriculum Contact instructor for approval prior to registration

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Master of Science in Biopharmaceutical Process Engineering (MSBPE)
Program Sheet and Graduation Requirement

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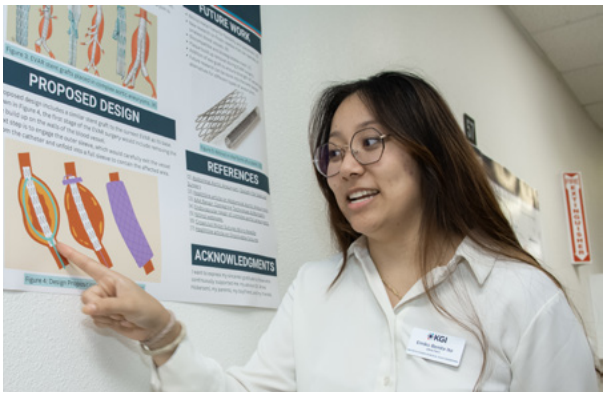
HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Science in Biopharmaceutical Process Engineering

MSBPE (1 Year Program)

Unlock advanced technical expertise, real-world industry experience, and indemand hands-on skills with the Master of Science in Bioprocessing Engineering (MSBPE). Designed for individuals with a bachelor's degree in biomanufacturing or related fields, this intensive one-year program prepares you to seamlessly enter the biopharmaceutical industry and pursue high-impact roles.



Highlights

Academic excellence

- Industry-focused curriculum
- Active learning-based education
- Hands-on skills

Student experience

- Industry-sponsored Team Masters Project (TMP) as a Capstone Project
- Industry networking and professional development skills
- Mentorship by the Amgen Bioprocessing Center Advisory Board (ABCAB) members

Career opportunities

- Summer internship at industry
- Successful career in top biopharma/biotech companies

Team Masters Project (TMP)

A Capstone Project, where students work in an industry-sponsored project with an interdisciplinary team under the guidance of Industry Liaison and Faculty Advisor. Great opportunity to experience real-life problem solving as a satellite team for a biopharma/ biotech company. Some of the recent TMPs include studies on cell culture, protein purification, modeling, facility design, quality/regulatory and supply chain sponsored by companies, such as Amgen, Boehringer Ingelheim, Catalent, Gilead, Pfizer and ThermoFisher Scientific

Why MSBPE

Launch your career as a successful bioprocessing professional in the biotech/biopharma industry. The following positions are options with a MSBPE degree:

- Process Development Scientist and Engineer
- Manufacturing Science and Technology Specialist
- Quality and Regulatory Scientist
- Field Application Scientist
- Project Manager
- Process Technology Transfer and Validation Specialist

About the program

Students in the MSBPE program are required to complete a minimum of 30 credits over the course of the program, and must complete a 400-hour, paid internship in the summer before or after their first year. Students will present an internship poster reviewed by KGI faculty.

Admission requirements

Qualified candidates with undergraduate degree in Biomanufacturing/Biochemical Engineering or equivalent will be considered for this one-year program.

Candidates are expected to cover the following topics as course requirements from their undergraduate program or equivalent in order to be considered for the MSBPE program

- Introduction to biotechnology
- Introduction to the fundamental principles of bioprocessing
- Introduction to upstream processing for biologics
- Introduction to downstream processing for biologics
- Introduction to the quality and regulatory aspects of biopharmaceutical processing

See details, deadlines and next steps for additional requirements

Details, deadlines, & next steps

General requirements

- Undergraduate degree in Biomanufacturing/ Biochemical Engineering
- Completed online application
- Personal statement
- Resume/CV
- Letter of recommendation upon request
- Official transcripts
- Admissions interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/msbpe

Contact us

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KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Science in Biopharmaceutical Process Engineering (MSBPE)

Class of 2026 Graduation Requirements

Qualified candidates with undergraduate degree in Biomanufacturing/Biochemical Engineering or equivalent, who satisfy the admissions requirements, will be considered for this **one-year program**. Students in the MSBPE program are required to complete a minimum of **30 Credits** over the course of the study.

Description	Credits
Biopharmaceutical Processing	7.5
Biopharmaceutical Processing LAB	7.5
Team Master Project (TMP) - Capstone Project	12
Other courses (Business, Science)	3
Total	**30**

Students are also required to complete a 400-hour, paid, relevant-industry internship in the summer before/after their first year, and present an internship poster reviewed by KGI faculty

Program Requirements

FALL Courses		
Course title	**Course number**	**Credit**
Engineering Fundamentals for Bioprocessing	ENG 5153	3
Introduction to Upstream Processing LAB	ENG 5133	1.5
Vector and Strain Design LAB	ENG 5151	1.5
Team Master Project (TMP) - Capstone	PDEV 6000	6
Advanced Bioseparations Engineering	ENG 6140	1.5
Advanced Upstream Processing	ENG 6132	1.5
Subtotal		**15**

SPRING Courses		
Course title	**New number**	**Credits**
Advanced Upstream Processing LAB	ENG 5134	1.5
Introduction to Bioseparations Engineering Lab	ENG 5141	1.5
Advanced Bioseparations Engineering Lab	ENG 5142	1.5
Data Analytics in R	MATH 5220	1.5
Team Master Project (TMP) - Capstone	PDEV 6000	6
Bioprocessing for Emerging Therapeutics	ENG 6152	1.5
Elective (ENG/MATH/SCI/RES/BUS)	TBD	1.5
Subtotal		**15**

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Master of Science in Applied Life Sciences (MS) Program Sheet and Graduation Requirement

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HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Science in Applied Life Sciences

MS

The two-year MS degree program prepares students for successful careers in translational, clinical, and public health research and management. This program aims to teach individuals to translate discoveries made through science and health-based research into medical and scientific innovations. Students will be provided with intensive instruction in translational, clinical, and public health research, fostering an extensive comprehension of how these facets are applied within the realm of medical science.

Highlights

Research expertise

Gain skills in research design and methodology, analyzing and reporting results

Team collaboration

Learn to communicate effectively and work productively in cross-functional teams

Real-world discoveries

Translate scientific discoveries into products and processes that benefit society

What sets KGI's MS apart from other master's programs?

- Life science industry focus
- Applied translational coursework and research
- Clinical research, shadowing, and mentorship
- Research in current public and community health issues
- Professional development opportunities, including physician shadowing and healthcare speaker series
- Real-life company sponsored team projects

About the program

The two-year MS program prepares students for a successful career in translational, clinical, or public health research and management, combining rigorous courses with a year-long research thesis project. Graduates are uniquely positioned to excel in a variety of careers addressing the critical and managerial needs of biotechnology and pharmaceutical companies, clinical and academic laboratories, and public health and doctoral research. Students in the MS program complete courses in core science, professional development, management, advanced technical topics, and a capstone project. Students also focus their studies further by selecting a concentration.

Concentrations

- Clinical Research
- Public Health
- Community Medicine
- Translational Research
- Infectious Diseases
- Biotechnology

What can I do with this degree?

Your Master of Science in Applied Life Sciences degree offers the competencies and strategic-thinking skills needed to pursue roles in several areas of clinical, public health, translational, and many more areas. Explore the careers and salary information that many of our graduates continue into after obtaining their KGI MS degree.

Top potential occupations:

- Research & development
- Medical & health services
- Natural sciences managers
- Clinical research coordinators
- Technical writers
- Clinical trial manager
- Clinical operations manager
- Disease investigator
- Environmental scientist
- Epidemiologist
- Microbiologist

As the program combines rigorous graduate-level courses with a year-long biomedical or clinical research project, it is a stepping stone to doctoral degrees such as MD, DO, PhD, or PharmD.

Learning outcomes

Science and research skills

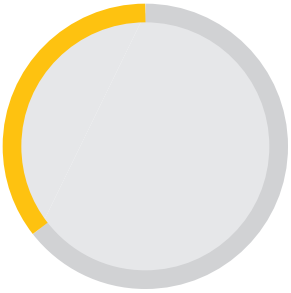
- Perform hypothesis-driven research
- Evaluate research design and methodology
- Analyze and report data results
- Assess scientific literature and identify knowledge gaps
- Translate scientific discoveries into products that benefit society

Communication and teamwork

- Communicate effectively with industry leaders
- Contribute productively on an interdisciplinary team

Ethics

- Learn about the ethical principals facing research, development, and business issues inherent in the bioscience industries, and how to adhere to them in your future work



35% Growth

Employer demand for clinical and translational science professionals nationwide grew by 35% between 2013-2017 and is projected to grow faster than the average for all occupations from 2017 to 2026.

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/ms

Contact us

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Revised 03/04/25

KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

2025-26 Academic Catalog/Class of 2027 Graduation Requirements

Master of Science in Applied Life Sciences (MS)

The Master of Science (MS) in Applied Life Sciences program requires students to complete 48.0 credits over two years. The program is designed to offer flexibility and depth through both core and elective courses, along with opportunities to specialize in a chosen field. Students must complete 15.0 credits of Core Science and Professional Development courses and 33.0 credits of elective courses.

Based on their post-graduation goals, students can follow one of three career-oriented tracks—Pre-health, Research, or Industry. Each track offers concentration options that allow students to specialize further in their field of interest: Translational Research, Infectious Diseases, Clinical Research, Public Health, Community Medicine, and Biotechnology. Each concentration requires a Thesis/Capstone project, which provides a hands-on opportunity to apply the knowledge and skills gained throughout the program. A non-concentration "a la carte" option is available for students who prefer a broader approach to their studies and does not require a culminating project.

Program Requirements

Core Requirements	Credits
Core Science & Professional Development Courses	15.0
Electives (Including the following intersecting requirements)	
— Advanced Technical and General Electives (including Concentration-Required Courses and a Thesis/Capstone project)	33.0

KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Core Science and Professional Development Courses (15.0 credits)

All students pursuing the MS in Applied Life Sciences must complete the Core Science and Professional Development courses.

Courses	Credits
SCI 5000 Molecular Biotechnology	1.5
SCI 5100 Molecular Basis of Disease	1.5
SCI 5300 Pharmaceutical Discovery	1.5
SCI 5310 Pharmaceutical Development	1.5
SCI 6000 Advanced Molecular Biotechnology	1.5
SCI 6100 Pharmacogenomics and Precision Medicine	3.0
PDEV 5100 Professional Development*	0.0
PDEV 5230 Healthcare Ethics OR **PDEV 5240** Life Science Industry Ethics	1.5
MATH 5020 Clinical Biostatistics	3.0

**Students enrolled in PDEV 5400 are exempt from the PDEV 5100 requirement.*

Elective Courses (33.0 Credits)

In addition to the core courses, students must complete 33.0 credits of elective courses, which may include concentration-specific courses or other KGI course offerings. Students are encouraged to work closely with the MS program director to select electives aligned with their academic and professional objectives. It is important to note that elective offerings vary by academic year, so students should plan their course selections carefully.

Students can refer to the Henry E. Riggs School of Applied Life Sciences course list for more information on course availability and designations.

Tracks and Concentrations

Students can select a track and concentration within each track that fits their post-graduation path, but a non-concentration ("a la carte") option is also available.

KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Career Track	Concentrations
Pre-health Designed to prepare students for admission into graduate healthcare programs. *Note:* Students may be eligible to enroll in the PDEV 5400 Premedicine Professional Development course. PDEV 5400 prerequisites: — Instructor's permission. — Available to domestic students only. — Completion of medical school or PA prerequisite courses. — A cumulative and/or science GPA of 3.0 or higher. — Demonstrated clinical and/or volunteer experience.	— Clinical Research — Public Health — Community Medicine — Translational Research — Infectious Diseases — Biotechnology
Research For students aiming to pursue PhDs in biomedical, healthcare, or other scientific research fields. *Note:* Students are recommended to enroll in Independent Research/Study during their first year to gain hands-on experience and a strong foundation in research skills.	— Translational Research — Infectious Diseases — Clinical Research
Industry Focused on preparing students for research and development (R&D) careers within the biotechnology, pharmaceutical, device, or clinical sectors. *Note:* Students are encouraged to work with Career Services to secure an optional summer internship during their studies.	— Biotechnology — Translational Research — Infectious Diseases — Clinical Research

Culminating Projects and Concentration Requirements

Each concentration requires students to complete 15.0 credits, including the culminating project. Depending on the concentration, students must complete one of the following options:

— 12.0-credit Master's Thesis/Capstone (RES 6200)
— 6.0-credit Master's Thesis/Capstone (RES 6201)
— 12.0-credit Team Master's Project (PDEV 6000)

Culminating projects are critical to the MS program, allowing students to engage in in-depth research or applied industry projects. Students enrolled in a 6.0-credit project per semester (12.0 credits total) must dedicate at least 18 hours per week to their project. Those enrolled in a 3.0-credit project per semester (6.0 credits total) must commit at least 9 hours per week.

- Students must declare a concentration and identify a culminating project by May 1 of their first year.
- All Thesis/Capstone projects require approval from the MS program director.
- Thesis/Capstone contracts should be submitted by the first week of the fall semester in the second year of study.
- Students in the Biotechnology Concentration should indicate their intent to participate in the concentration by submitting the Concentration Declaration form by the May 1 deadline.

Translational Research Concentration

Translational Research, which involves wet lab-based or bioinformatic projects, aims to translate discoveries into practical therapies, devices, or treatments that can improve patient outcomes.

Courses	Credits
RES 6200 Master's Thesis/Capstone	12.0
SCI 6401 Fundamental Papers in Molecular Biology and Biotechnology	1.5
SCI 6410 Fundamental Papers in Applied Medicine	1.5

Clinical Research Concentration

Clinical Research projects focus on improving disease prevention, diagnosis, treatment, and understanding. Projects with COPE Health Scholars focus on enhancing the operational aspects of healthcare delivery. Students interested in COPE projects may apply through the KGI-COPE application website by May 1 of their first year of studies.

Courses	Credits
RES 6200 Master's Thesis/Capstone	12.0
SCI 5240 Medical Terminology	3.0

Public Health Concentration

Public Health projects involve studies aimed at protecting and improving the health of populations through education, policy-making, and research for disease prevention and control.

Courses	Credits
RES 6200 Master's Thesis/Capstone	12.0
SCI 6600 Infectious Disease Epidemiology	3.0

Community Medicine Concentration

Community Medicine projects address health needs and issues specific to local communities and frequently involve working with underserved populations and implementing preventative healthcare measures.

Courses	Credits
RES 6200 Master's Thesis/Capstone	12.0
MSCM 5105 Health Systems Sciences OR **MSCM 5302** Community Health Challenges OR **MSCM 5501** Direct to Community Healthcare	3.0

Infectious Diseases Concentration

Infectious disease projects can take both laboratory and clinical directions, each contributing to the broader goal of understanding, preventing, and treating infectious diseases.

Students enrolled in the Infectious Diseases Concentration must work on a Thesis/Capstone project related to infectious diseases (drug discovery, medical devices, bioinformatics, the molecular basis of a disease, *etc.*). Option A (6.0-credit Master's Thesis/Capstone) and Option B (12.0-credit Master's Thesis/Capstone) are available.

Option A Courses	Credits
RES 6201 Master's Thesis/Capstone	6.0
SCI 6300 Advanced Pharmaceutical Discovery	1.5
SCI 6301 Advanced Pharmaceutical Discovery Lab	1.5
SCI 6500 Virology	1.5
SCI 6510 Medical Microbiology and Infectious Diseases	1.5
SCI 6600 Infectious Disease Epidemiology	3.0

Option B Courses	Credits
RES 6200 Master's Thesis/Capstone	12.0
SCI 6500 Virology	1.5
SCI 6510 Medical Microbiology and Infectious Diseases	1.5

Biotechnology Concentration

Biotechnology projects (TMP) are real-life group-based projects that allow students to apply their academic knowledge and skills to a real-world problem or challenge in collaboration with biotechnology and pharma industry partners.

Courses	Credits
PDEV 6000 Team Master's Project	12.0
BUS 6400 Organizational Behavior	3.0

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Master of Science in Human Genetics and Genomic Data Analytics (MSGDA) Program Sheet and Graduation Requirement

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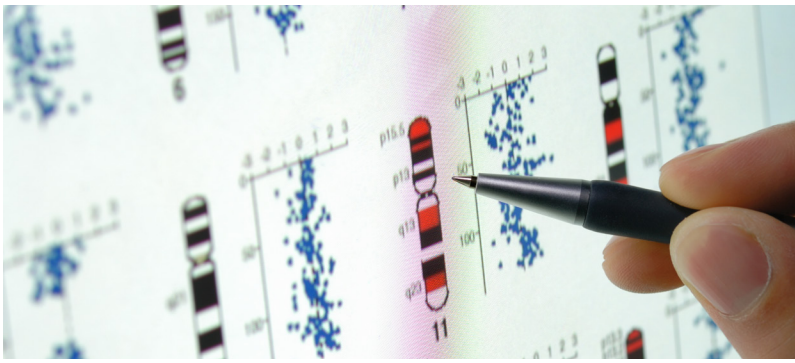
HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Science in Human Genetics and Genomic Data Analytics

MSGDA

The MSGDA degree program prepares students for the exciting field of genomic data analytics through a unique combination of foundational coursework in human genetics, cutting-edge courses in the applied life sciences, and an innovative human genomics curriculum. This unique program gives students an opportunity to work side-by-side with future genetic counselors and applied life scientists while gaining hands-on experience with the technologies and information that are revolutionizing the future of medicine.



Highlights

Next-gen technology

Be at the forefront of next-generation sequencing technology

Real industry experience

Hands-on project at a genomics company or clinical lab

Bench to bedside

Bridge the gap between research scientists and clinical practitioners

MSGDA concentrations

We have three concentrations depending on student interest:

Clinical decision support—Designed for those interested in helping clinicians interpret patient data for personalized medicine in careers such as clinical variant curator or genomic data scientist.

Clinical trial design—Designed for those interested in contributing to personalized medicine by working at a pharmaceutical or biotech company in the drug development pipeline.

Assay development—Designed for those interested in using genomics knowledge to develop new clinical assays or products for the diagnosis of disease.

All three concentrations prepare students for a variety of roles in not just the genomics industry, but also academia, pharmacogenomics, and more.

About the program

The 21-month MSGDA program combines coursework from life sciences and health sciences, practical experience through a summer internship, and hands-on learning in clinical genetics, DNA sequencing, and data analysis to prepare students for careers in human genomics. Upon completion of the program, students will be able to utilize their foundation in genetics and genomics, practical knowledge of data analytics and bioinformatics, and their industry experience to be able to translate patient sequencing data into actionable clinical recommendations or novel precision medicine approaches.

Year 1

In the first year, students gain a solid foundation in human genetics and genomics, medical genetics, bioinformatics, and an introduction to working in the bioscience industry and clinical settings. Students also learn about clinical trial design and data systems used in the bioscience industry and gain hands-on laboratory experience by generating and manipulating next-generation sequencing data.

In the summer, students will gain experience in human genomic data analysis by completing a paid internship in an industry or clinical laboratory setting.

Year 2

In the second year, students pursue in-depth courses in next-generation sequencing technologies, DNA variant interpretation, and genomic data visualization. Emerging topics in genomics, such as pharmacogenomics and genetic engineering, are covered and prepare students for their capstone industry-sponsored project or research thesis.

Graduate with experience through an intensive, paid internship

- Join the growing field of genomics and help create effective and appropriate treatments for patients
- Learn to harness the power of Big Data to help patients through personalized precision medicine
- Distinguish yourself on the job market through team project experiences and internships with genetics companies
- Understand how emerging companies (like 23andMe.com and ancestry.com) translate genotype data
- Help people on a large scale by improving clinical results
- Be at the forefront of next-generation sequencing technology
- Experience inter-professional education through collaboration with students from other KGI programs
- Combine your passions to make a broad-scale impact in the world of genetics and genomics
- Graduate with hands-on experience

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/msgda

Contact us

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Revised 03/04/25

KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

2025-26 Academic Catalog/Class of 2027 Graduation Requirements

Master of Science in Human Genetics and Genomic Data Analytics (MSGDA)

Students in the MSGDA program are required to take a minimum of **63.5 credit hours** over the course of two years of study. The coursework is comprised of required courses, elective courses, and a capstone project.

Students must also complete a 400-hour internship.

Program Requirements:

Fall 1 Courses	Credits
GENE 5120 Bioinformatics in Python	1.5
GENE 5190 MSGDA Journal Club	0.0
GENE 5200 Human Molecular Genetics	3.0
GENE 5240 Genetic Disease Mechanisms	1.5
BUS 5000 Introduction to Bioscience Industries	3.0
MATH 5020 Clinical Biostatistics	3.0
MATH 5100 Data Analytics in Python	1.5
Subtotal	**13.5**

Spring 1 Courses	Credits
GENE 5130 Bioinformatics in R	1.5
GENE 5150 Human Genomics NGS Lab	2.0
GENE 5191 MSGDA Journal Club	0.0
GENE 5250 Human Genomics	3.0
GENE 5260 Clinical Cancer Genomics	3.0
GENE 5270 Medical Genetics	3.0
MATH 5220 Data Analytics in R	1.5
GENE 5280 Biochemical Genetics	1.5
REG 6520 Clinical Trial Design and Literature Evaluation	3.0
Subtotal	**18.5**

Fall 2 Courses	Credits
GENE 6130 DNA Sequencing and Variant Analysis	3.0
GENE 6140 Functional Genomics	3.0
GENE 6190 MSGDA Journal Club	0.0
GENE 6900 MSGDA Capstone Project I	6.0
Subtotal	**12.0**

Spring 2 Courses	Credits
GENE 5290 Pharmacogenomics	1.5
GENE 6135 Genomic Knowledge Translation	1.5
GENE 6145 Genomic Data Visualization and Management	3.0
GENE 6191 MSGDA Journal Club	0.0
GENE 6901 MSGDA Capstone Project II	6.0
Subtotal	**12.0**

Students are required to take 1.5 credit hours of ethics, either **PDEV 5230 Healthcare Ethics** (Fall) or **PDEV 5240 Life Science Industry Ethics** (Spring).

In addition to the above required courses, students will select 6 units of electives to satisfy their concentration requirement. *Please note that not all elective courses are offered every year.* Students are required to declare their concentration by May 15 of their first year and will begin taking electives in their 2nd year.

Up to 3 units may be counted from courses taken at CGU with permission of the program director.

Clinical Decision Support	Credits
GENE 5020 Human Embryology and Prenatal Diagnosis	3.0
GENE 6447 Microbiomics and Pathogen Genomics	1.5
GENE 6446 Genetic Engineering	1.5
SCI 5100 Molecular Basis of Disease	1.5
SCI 5240 Medical Terminology	3.0
SCI 6410 Fundamental Papers in Applied Medicine	1.5
MATH 5300 Machine Learning in the Life Sciences	1.5

Clinical Trial Design	Credits
GENE 6446 Genetic Engineering	1.5
REG 5000 Introduction to US Food and Drug Law	1.5
REG 6510 Design of Clinical Trials	1.5
MATH 5300 Machine Learning in the Life Sciences	1.5
SCI 5300 Pharmaceutical Discovery	1.5
SCI 5310 Pharmaceutical Development	1.5
SCI 6310 Biotechnology-based Therapeutics	3.0
SCI 6710 Technologies for Biomarker and Drug Discovery	1.5

Assay Development	Credits
GENE 6446 Genetic Engineering	1.5
GENE 6447 Microbiomics and Pathogen Genomics	1.5
BUS 6600 Business Operations	3.0
BUS 6710 Biotech Entrepreneurship	1.5
MATH 5300 Machine Learning in the Life Sciences	1.5
REG 5000 Introduction to US Food and Drug Law	1.5
SCI 5000 Molecular Biotechnology	1.5
SCI 5240 Medical Terminology	3.0
SCI 5700 Medical Diagnostics	3.0
SCI 6401 Fundamental Papers in Molecular Biology and Biotechnology	1.5
SCI 6410 Fundamental Papers in Applied Medicine	1.5
SCI 6710 Technologies for Biomarker and Drug Discovery	1.5

KECK GRADUATE INSTITUTE
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Master of Science in Medical Device Engineering (MSMDE) Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

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HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

Master of Science in Medical Device Engineering

MSMDE

If you're passionate about healthcare and technical innovation, the Master of Science in Medical Device Engineering (MSMDE) at KGI is the degree for you. In one year of study, you'll learn to develop innovative surgical tools, diagnostic instruments, and other life-saving technologies. In addition to device development, this program will elevate your understanding of production planning and management, aiding your ability to improve the healthcare industry overall.

What should you know about this program?

Research and development are critical

To solve design problems effectively, you'll learn to understand the nuances of clinical settings and user needs, as well as the full breadth of technology in the industry today.

No great device comes to life on its own

Sponsored by KGI's real-world partners, the Team Master's Project provides you with an exclusive opportunity to consult with industry leaders in a powerful team-oriented format.

Manufacturing and quality control can't be ignored

Engineering great medical devices requires an appreciation of the practices behind the manufacture of quality devices, from conceptual development to production control.

Follow the pathway that interests you most

Unlike other restrictive programs, KGI supports your exploration of elective courses and the pursuit of a specialty, be it in-vitro diagnostics, regulatory affairs, or something else.

What sets KGI apart?

- Industry-sponsored projects
- Advisory board connections
- Signature capstone experiences
- Expansive alumni network
- Case-based coursework

What does the curriculum look like?

Created to provide you with the most authentic, industry-relevant experience possible, the curriculum covers all key areas of engineering applicable to the field of medical devices. Outside of the core curriculum, elective options—such as data analysis, regulatory affairs, and business of biosciences—allow for the broadening of general knowledge.

Fall	Spring
Medical Diagnostics	Medical Devices
Product Development	Production Methods
Industry Sponsored Team Masters Project	Industry Sponsored Team Masters Project
Specialty Electives	Specialty Electives

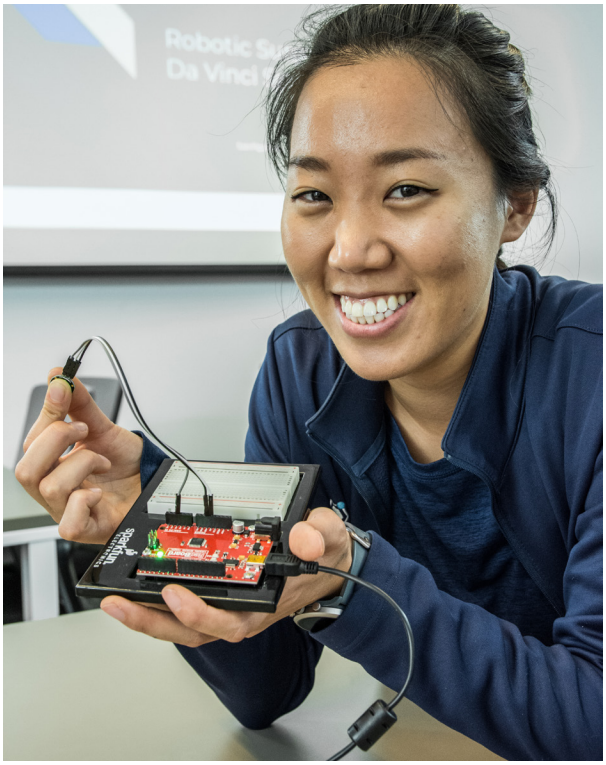
What career options do graduates have?

Job placement is 100% for graduates of KGI's Master of Science in Medical Device Engineering, and the available career options are nothing short of exceptional. As a graduate, you will be sought after by companies for an array of opportunities including general research, device maintenance, software development, device testing, and more.

In addition to your core studies, you will receive personal coaching as it relates to the development of critical interpersonal skills (communication, teamwork, organization, etc.), preparation for job interviews, and the selection of areas of focus within the broader device engineering industry.

Do I get access to a medical device lab?

Yes, you do. As a student, you'll enjoy unencumbered access to the Medical and Assistive Device (MAD) Lab. Equipped with state-of-the-art prototyping technologies for electronic and mechanical work (e.g., laser cutters, vacuum formers, 3D printers, etc.), this facility is where you'll hone some of your most marketable professional skills.



Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/msmde

Contact us

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Revised 03/04/25

KGI HENRY E. RIGGS SCHOOL OF APPLIED LIFE SCIENCES

2025-26 Academic Catalog/Class of 2026 Graduation Requirements

Master of Science in Medical Device Engineering (MSMDE)

Students in the MSMDE program are required to complete a minimum of **30.0 credits** over the course of one year of study. The coursework is comprised of required courses, elective courses, and a capstone project.

Core Requirements

Fall Core Courses	Credits
SCI 5700 Medical Diagnostics	3
ENG 6340 Device and Diagnostic Product Development	3
PDEV 5000 Team Masters Project or **PDEV 6000** Team Masters Project	3 or 6
PDEV 5100 Professional Development	0
Subtotal	**12 or more**

Spring Core Courses	Credits
ENG 5300 Medical Devices	3
ENG 6350 Medical Device Production	3
PDEV 5000 Team Masters Project or **PDEV 6000** Team Masters Project	3 or 6
Subtotal	**12 or more**

Core Courses

All students must complete the named courses above to complete the MSMDE degree.

Elective Courses

All MSMDE students are required to complete additional credits of elective courses to meet the 30 credit minimum for the program. Not all electives are offered every year. Refer to the KGI Henry E. Riggs School of Applied Life Sciences course catalog for information.

Independent Study/Independent Research (IS/IR) Courses

Students may enroll in 1.5 or 3.0 credits of independent study or research per semester. To enroll in IS/IR, the student must complete the Independent Study/Research Contract and return it to the Registrar's Office before the last day to add courses. Independent study is the acquisition of skills, knowledge, or information that is known among professionals. For example, learning lab skills or preparing for a certification exam. Independent research is comprised of work aimed at generating novel techniques, knowledge, or synthesis of information.

Please see the Independent Study/Research page for more information. To fill out an IS/IR Contract, click here.

Academic Petitions

Examples of requests include, but are not limited to, the following:

- Course overload: permission to take more than 19.5 credits
- Exceptions to registration deadlines (i.e., late add/drop)
- Variances in cross-registration and general education requirements
- Students requesting part-time status
- Exceptions to graduation requirements or other KGI academic policies

Please see the Academic Petitions page for more information. To fill out an Academic Petition, click here.

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Doctor of Philosophy in Applied Life Sciences (PhD) Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

A Member of The Claremont Colleges

Doctor of Philosophy in Applied Life Sciences

PhD

KGI's PhD in Applied Life Sciences provides students with expertise in research areas relevant to applied biosciences. Using state-of-the-art interdisciplinary tools and approaches to solve problems, students use the knowledge they gain through this degree program to advance new horizons in the applied biosciences.

Highlights

Strong foundation

Draw upon a unique interdisciplinary and applied educational foundation through continued studies and applied research.

Original research

Gain competence in the methods of scientific inquiry by conducting and communicating original research for their theses.

Translate discoveries

Become adept in the translation of science and engineering discoveries into products and processes that benefit society.

About the program

KGI's PhD program enriches students experiences in both science and business aspects of the bioscience industry, making them unique among the graduate pool. All applicants must have completed a master's degree focused on applied life sciences. Completion of the PhD Program is anticipated to require at least an additional three years of full-time study beyond the master's degree with the possibility for extension depending on the particular research project.

Graduates of KGI's PhD program are expected to:

- Apply rigorous research methodologies to original, independent experimental, theoretical, and/or computational work in applied bioscience.
- Develop both a broad understanding of current scientific advances and mastery in an area of interdisciplinary science of relevance to applied bioscience sufficient for conducting original research.
- Understand the translation of basic science and engineering discoveries into products and processes, which benefit society.
- Adhere to ethical principles in research, development, and business issues inherent in the bioscience industries.

KGI offers three PhD tracks

Traditional track

The student is conducting PhD studies on KGI premises under supervision of KGI faculty. To foster interdisciplinary research, the student may have one or more research advisors. One advisor must be a KGI faculty member; additional advisors may be from collaborating institutions or corporations.

Industry-Sponsored track

The student is sponsored by a biotechnology or pharma company. This track involves the student conducting studies at KGI under the supervision of a KGI faculty advisor, but on behalf of the sponsoring organization.

Industry-Hosted track

The student is sponsored and hosted by a biotechnology or pharma company. This track involves the student conducting studies at the company site and remotely engaging with the KGI PhD program. In addition to the company research advisor, the student must be supervised by a KGI faculty advisor

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/phd

Contact us

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Revised 03/04/25

2025-26 Academic Catalog/Class of 2028 Graduation Requirements

Doctor of Philosophy in Applied Life Sciences (PhD)

The mission of KGI's PhD in Applied Life Sciences is to endow a select group of students with expertise in research areas relevant to applied bioscience, with the ability to use interdisciplinary tools and approaches to solve problems, and with the motivation to translate knowledge to beneficial applications to advance new horizons in the applied biosciences. Students complete milestones based on their corresponding year in the program, which culminates in the student delivering their final Dissertation Defense presentation to the public and a Committee-approved final published Dissertation.

Program Learning Outcomes

After completing the PhD, students should be able to:

- Apply rigorous research methodologies to original, independent experimental, theoretical, and/or computational work in applied bioscience
- Integrate the fundamentals of computational and informational science, engineering design, and biomolecular technologies to solve problems in applied life science.
- Communicate effectively in an academic as well as in an industry environment composed of students, scientists, engineers, administrators and business professionals.
- Demonstrate core business analysis and management knowledge needed for the bioscience industry and can assume leadership roles in realizing the goals of technical and business projects.
- Develop both a broad understanding of current scientific advances and mastery in an area of interdisciplinary science of relevance to applied bioscience sufficient for conducting original research.
- Understand the translation of basic science and engineering discoveries into products and processes, which benefit society.
- Adhere to ethical principles in research, development and business issues inherent in the bioscience industries.

Graduation Requirements

In each semester, PhD students are required to pass PDEV 7200 Current Topics in Applied Life Sciences, a 1.5-credit course, that addresses bioindustry ethics, biomedical ethics, and serves as a weekly research seminar for all researchers at KGI. Requirements based on the student research progress and the semester of their due dates follow and are administered through RES 7000 PhD Research and Milestones, a 13.5-credit course.

First Year

First Semester

1. PhD Thesis Committee Established. Documented by Committee Recommendation/Revision Form signed by advisor and submitted by the student to PhD Office (within three months of starting program). External member CV or resume required.
2. Dissertation Literature Mastery Seminar (on PhD research). Documented by rubrics filled by attending faculty administered by PhD Office, Milestone reporting form by Advisor submitted to PhD Office immediately following seminar.

Second Semester

1. Research Symposium (Advisor-approved poster presentation). Documented by reviewer faculty rubrics
2. Dissertation Qualifiers: Thorough background & significance with research plan, early results, and complete references plus presentation to committee. The written report in faculty-specified format (review article or journal article format is typical) is due to the Committee at least two weeks prior to presentation. Documentation by Committee Feedback form filled by Faculty Advisor summarizing committee feedback submitted to both student and PhD Office.

Second Year

Summer

No major deliverables. Student should work on research and prepare to provide the three deliverables in the second semester.

First Semester

1. Dissertation Literature Mastery Report (on PhD research)

Second Semester

1. Research Symposium (poster presentation). Documented by reviewer faculty rubrics administered by PhD Office.
2. Graduate Student Literature Seminar (in their field but not their own Dissertation Research; Transferrable Skills). This provides background for Research Proposal in the Summer. Documented by rubrics filled by attending faculty administered by PhD Office, Milestone reporting form by Advisor submitted to PhD Office immediately following seminar.
3. Dissertation Progress Report and Presentation to Committee: The written report in faculty- specified format (journal article format is typical) is due to Committee at least two weeks prior to presentation. Documentation by Committee Feedback form filled by Faculty Advisor summarizing committee feedback submitted to both student and PhD Office.

Third Year

Summer

Transferable Skills – Research Proposal/Business Plan in field but outside dissertation topic. Topic and format approved by Advisor (6-10 page is typical e.g., SBIR Phase I proposal format) to be assessed by committee. Documentation by Committee Feedback form filled by Faculty Advisor summarizing committee feedback submitted to both student and PhD Office before Fall semester begins.

First Semester

Research manuscript published or Publication-Quality draft manuscript where student is the primary or other important contributing author. Documented by Milestone reporting form by Advisor submitted to PhD Office before semester ends.

Second Semester

1. Research Symposium (oral presentation). Documented by reviewer faculty rubrics administered by PhD Office.
2. Dissertation Draft due to the Committee. Submit by April 7 to graduate in May; at least eight weeks prior to July and December graduations.
3. Dissertation Defense to be scheduled two weeks prior to the required Committee Approval Date. Documented by Dissertation Defense form signed by all Committee Members upon completion of the committee meeting immediately following the defense seminar.
4. Dissertation Completion. Documented by PhD Dissertation Completion form signed by all Committee members after corrections/editing post defense AND confirmation from Proquest ETD that the final Dissertation has been posted.

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SHS Program Information and Graduation Requirements

KECK GRADUATE INSTITUTE
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Master of Science in Human Genetics and Genetic Counseling (MSGC)
Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

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SCHOOL OF HEALTH SCIENCES

Master of Science in Human Genetics & Genetic Counseling

MSGC

The Master of Science in Human Genetics and Genetic Counseling advances society by training the next generation of innovative, collaborative, and compassionate geneticists. As a student in this rigorous program, you will learn how to translate cutting edge applied and clinical science into the delivery of exceptional patient care. KGI's hands-on approach to education ensures you're immersed in both classroom learning as well as rich, real-world clinical experiences during your two years of study. When you graduate, you'll understand how to make tangible improvements in the quality of life for individuals coping with genetic conditions, and how to be a leader within the healthcare sector.

Why should you obtain your MSGC at KGI?

Learning that caters to you

KGI understands that you are unique as an individual and as a student. The Master of Science in Human Genetics and Genetic Counseling is a flexible program that can be personalized in many ways to meet your needs as a learner.

Clinical connections beyond the norm

If you value access to diverse clinical experiences and dynamic fieldwork opportunities, KGI is the school for you. By tapping into the inherent ethnocultural and socioeconomic variety of Southern California, KGI allows you to hone real-world skills in a wide selection of labs, hospitals, and patient care facilities.

Learning outside of books, labs, and lectures

Hands-on learning is a cornerstone of the student experience at KGI. The school's "flipped methodology" gives you more control as a student, better positions you to refine your real-world skills, and gives you an advantage within the private sector.

What Is the ultimate goal of this program?

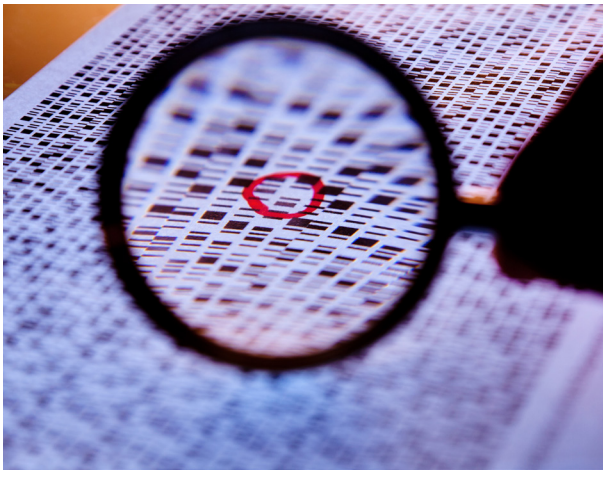
To provide you with the fundamental education and experiences necessary to become a genetic counselor who's not only proficient in their career, but also innovative and inspired in their approach to work.

What does the coursework look like?

While traditional, didactic learning is a core component of the Master of Science in Human Genetics and Genetic Counseling, it only accounts for 60% of your studies. The other 40% is a blend of research and fieldwork focusing on the application of genetic medicine within the rich cultural landscape of Southern California.

How are the faculty at KGI?

The faculty at KGI is exceptional. Your instructors possess graduate degrees from elite institutions such as the California Institute of Technology, and work experience at some of the finest medical facilities in the country such as Columbia University Medical Center. All your instructors are committed to the advancement of genetic counseling and the cultivation of its future leaders.



What career can you pursue with your MSGC degree?

With a Master of Science in Human Genetics and Genetic Counseling you'll enjoy no shortage of incredible career opportunities. As a graduate, there will be opportunities for you to work within many areas of research, public health policy, and direct patient care.

- **~70%** of genetic counselors work in **direct patient care**
- **$95,770 is the median pay** for a genetic counselor in the United States, but **pay can exceed $250,000**
- **Hiring is exploding**; the number of genetic counselors is projected to **double by 2030**

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/msgc

Contact us

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KGI SCHOOL OF PHARMACY AND HEALTH SCIENCES

2025-26 Academic Catalog/Class of 2027 Graduation Requirements

Master of Science in Human Genetics and Genetic Counseling (MSGC)

Students in the Master of Science in Human Genetics and Genetic Counseling program are required to complete a total of 70 credit hours over the course of 21 months (five semesters) of study. This includes:

- 35 units of didactic courses
- 26 units of clinical fieldwork
- 9 units of research/capstone preparation

Program Requirements

1st Year Fall Courses	Credit Hours
MATH 5020 Clinical Biostatistics	3.0
GENE 5000 Genetic Counseling I	3.0
GENE 5020 Human Embryology and Prenatal Diagnosis	3.0
GENE 5030 Research Methodology I	1.5
GENE 5040 Principles of Public Health	1.5
GENE 5090 Case Conference & Journal Club	0.0
GENE 5200 Human Molecular Genetics	3.0
GENE 5240 Genetic Disease Mechanisms	1.5
GENE 5800 Genetic Counseling Fieldwork Observation	1.0
Subtotal	**17.5**

1st Year Spring Courses	Credit Hours
GENE 5050 Genetic Counseling II	3.0
GENE 5060 Research Methodology II	1.5
GENE 5091 Case Conference & Journal Club	0.0
GENE 5055 Ethics of Genomic Medicine	1.0
GENE 5250 Human Genomics	3.0
GENE 5260 Clinical Cancer Genomics	3.0
GENE 5270 Medical Genetics	3.0
GENE 5280 Biochemical Genetics	1.5
GENE 5290 Pharmacogenomics	1.5
GENE 5801 Genetic Counseling Fieldwork Observation	1.0
	18.5

Summer Courses	Credit Hours
GENE 6801 Genetic Counseling Fieldwork I	8.0
Subtotal	**8.0**

2nd Year Fall Courses	Credit Hours
GENE 6000 Psychosocial Development I	1.0
GENE 6010 Professional Development I	1.0
GENE 6090 Case Conference & Journal Club	0.0
GENE 6094 ABGC Board Review	0.0
GENE 6802 Genetic Counseling Fieldwork II	4.0
GENE 6803 Genetic Counseling Fieldwork III	4.0
GENE 6950 Capstone Project I	3.0
Subtotal	**13.0**

2nd Year Spring Courses	Credit Hours
GENE 6050 Psychosocial Development II	1.0
GENE 6060 Professional Development II	1.0
GENE 6091 Case Conference & Journal Club	0.0
GENE 6095 ABGC Board Review	0.0
GENE 6804 Genetic Counseling Fieldwork IV	4.0
GENE 6805 Genetic Counseling Fieldwork V	4.0
GENE 6951 Capstone Project II	3.0
Subtotal	**13.0**

KECK GRADUATE INSTITUTE
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Master of Science in Physician Associate Studies (MSPA) Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

A Member of The Claremont Colleges

SCHOOL OF HEALTH SCIENCES

Master of Science in Physician Associate Studies

MSPA

The Chan Family Master of Science in Physician Associate Studies prepares students like you to deliver critical medical functions (such as conducting clinical examinations, diagnosing disease, creating treatment plans, and performing medical procedures) within the community you serve. At KGI, your instructors will shine a light on the social factors shaping modern healthcare and emphasize the importance of patient-centered medicine in acute, high-pressure settings such as the emergency room or operation theater. From rich clinical experiences in Southern California's top medical facilities to collaboration with interdisciplinary teams, KGI's MSPA program delivers an incomparable, real-world education that positions you to be a leader in community and public health.

What makes the MSPA program at KGI unique?

Entrepreneurial emphasis

Training in the key foundations of entrepreneurship enables you to be a more effective physician associate. This training not only enhances your capacity to make critical decisions quickly in a semi-autonomous environment but improves your ability to create your own career path.

Emphasis on acute care

When you graduate from KGI, you'll be equipped to work in any medical environment, but you'll be especially well-suited to thrive within areas of acute care such as an ER or hospital.

Interdisciplinary integration

Well-rounded physician associates are the best physician associates. To that end, you'll benefit from robust collaboration with many of KGI's other programs including pharmacy, occupational therapy, genetics, and medical device engineering.

What can you do with your MSPA degree?

Stated simply, a lot. Demand for talented physician associates will rise 31% by 2028. As a graduate from the Chan Family Master of Science in Physician Associate Studies program, you will be sought after by various healthcare organizations nationwide. While you will be especially prepared for work in short-term intensive care (operating rooms, ERs, etc.), you'll be more than qualified for various other specialties including internal medicine, women's health, behavioral health, oncology, and more. In addition to being exceptional PAs, graduates from KGI's MSPA program also go on to be healthcare administrators and educators.

Accreditation status: The ARC-PA has granted Accreditation-Provisional status to the Keck Graduate Institute Physician Assistant Program sponsored by Keck Graduate Institute.
Accreditation-Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program's ability to meet the ARC-PA Standards or when a program holding Accreditation-Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students.
Accreditation-Provisional does not ensure any subsequent accreditation status. It is limited to no more than five years from matriculation of the first class.
The program's accreditation history can be viewed on the ARC-PA website at www.arc-pa.org/accreditation-history-keck-graduate-institute/.

What you can expect while studying at KGI?

Active, engaged learning environments

KGI emphasizes active learning that emphasizes human engagement and real-world teamwork. You will get access to clinical experiences and patients, allowing you to strengthen your interpersonal and technical skills before starting clinical rotations.

Community roots that run deep

As a student, you will be involved in the care and education of the local community. KGI will present you with many volunteering opportunities so you can better understand the community's diverse background and needs. In doing so, you'll learn to recognize health disparities, provide more compassionate care, and strive for health equity.

Rigorous preparation for leadership

You will engage in rigorous career preparation so you're not only poised to exceed the required professional standards of a practice-ready physician associate, but you're also prepared to be a leader in the organizations and communities that you choose to serve.

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/mspa

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Revised 03/04/25

KGI KECK GRADUATE INSTITUTE

School of Health Sciences

2025-26 Academic Catalog/Class of 2027 Graduation Requirements

Master of Science in Physician Associate Studies (MSPA)

The MSPA program is a full-time, 28-month, year-round graduate program that consists of 124 semester credit hours completed over seven semesters. The program is divided into a 16-month didactic phase and a 12-month clinical phase. The final 12 months of the MSPA program is the clinical phase, which includes a capstone project and eight 6-week clinical rotations in a range of disciplines and healthcare settings. In addition to seven core disciplines, students also complete one clinical elective rotation. Following each clinical rotation, students return to campus for callback day activities, including written examinations, practical exams, and case presentations.

Program Requirements

Fall 1 Courses	Credits
MSPA 5101 PA Professional Practice I	1.0
MSPA 5121 Basic Medical Sciences	4.0
MSPA 5131 Patient Assessment I	3.0
MSPA 5141 Clinical and Diagnostic Skills I	1.0
MSPA 5151 Evidence-Based Medicine	3.0
MSPA 5161 Community Health	2.0
MSPA 5171 Medical Anatomy and Physiology	5.0
Subtotal	**19.0**

Program Requirements

Spring 1 Courses	Credits
MSPA 5102 PA Professional Practice II	2.0
MSPA 5201 Clinical Medicine I	6.0
MSPA 5211 Pharmacotherapeutics I	3.0
MSPA 5132 Patient Assessment II	3.0
MSPA 5142 Clinical and Diagnostic Skills II	4.0
MSPA 5221 Clinical Integration and Application I	2.0
Subtotal	**20.0**

Program Requirements

Summer 1 Courses	Credits
MSPA 5103 PA Professional Practice III	2.0
MSPA 5202 Clinical Medicine II	6.0
MSPA 5212 Pharmacotherapeutics II	3.0
MSPA 5133 Patient Assessment III	3.0
MSPA 5143 Clinical and Diagnostic Skills III	4.0
MSPA 5222 Clinical Integration and Application II	2.0
Subtotal	**20.0**

Program Requirements

Fall 2 Courses	Credits
MSPA 5104 PA Professional Practice IV	1.0
MSPA 5203 Clinical Medicine III	4.0
MSPA 5213 Pharmacotherapeutics III	3.0
MSPA 5134 Patient Assessment IV	3.0
MSPA 5144 Clinical and Diagnostic Skills IV	3.0
MSPA 5223 Clinical Integration and Application III	2.0
MSPA 5401 Fundamentals of Surgery and Emergency Medicine	5.0
Subtotal	**21.0**

During the clinical phase, students will complete a series of three didactic courses, during which they will also develop and complete a Capstone project. Each student will complete a total of eight six-week Supervised Clinical Practice Experiences (SCPEs) across the disciplines listed below, including one elective SCPE in a discipline of the student's choice. All students are required to complete each of the eight SCPEs, though the order of completion may vary. Upon completion of the final SCPE, students must participate in a program-provided PANCE review course. This course is offered for zero academic credit and is graded on a pass/fail basis based on participation and attendance.

Program Requirements

Spring 2 Courses	Credits
MSPA 6101 Advanced PA Professional Practice I	1.0
MSPA 6111 Supervised Clinical Practice Experience I	5.0
MSPA 6112 Supervised Clinical Practice Experience II	5.0
MSPA 6113 Supervised Clinical Practice Experience III (*will complete in Summer semester*)	5.0
Subtotal	**16.0**

Program Requirements

Summer 2 Courses	Credits
MSPA 6102 Advanced PA Professional Practice II	1.0
MSPA 6114 Supervised Clinical Practice Experience IV	5.0
MSPA 6115 Supervised Clinical Practice Experience V	5.0
Subtotal	**11.0**

Program Requirements

Fall 3 Courses	Credits
MSPA 6103 Advanced PA Professional Practice III	2.0
MSPA 6116 Supervised Clinical Practice Experience VI	5.0
MSPA 6117 Supervised Clinical Practice Experience VII	5.0
MSPA 6118 Supervised Clinical Practice Experience VIII	5.0
MSPA 6104 PANCE Review Course	0.0
Subtotal	**17.0**

Program Requirements

SCPE Types
Students are required to complete each of the following Sections for MSPA 6111-6118 Supervised Clinical Practice Experiences. Each experience is 5 credit hours as above.
Family Medicine (Section A)
Emergency Medicine (Section B)
Internal Medicine (Section C)
Surgery (Section D)
Pediatrics (Section E)
Women's Health (Section F)
Behavioral and Mental Health (Section G)
Clinical Elective (Section H)

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Occupational Therapy Doctorate (OTD) Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

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SCHOOL OF HEALTH SCIENCES

Occupational Therapy Doctorate

OTD

The Occupational Therapy Doctorate (OTD) program at Keck Graduate Institute offers a transformative education designed to prepare future leaders in the field of occupational therapy. This cutting-edge program equips students with the skills and knowledge needed to make a meaningful impact in diverse settings, from healthcare and education to community organizations and private practice. With an OTD, graduates can pursue fulfilling careers, helping individuals of all ages enhance their ability to participate in daily activities and promoting independence, well-being, and quality of life.

Why should you consider this program?

Why KGI

What sets KGI's program apart is its integration of innovative healthcare solutions and interprofessional education. As part of The Claremont Colleges, KGI provides unparalleled access to resources, mentorship, and research opportunities, ensuring that students are at the forefront of advancements in occupational therapy. The program emphasizes leadership, technology integration, and entrepreneurship, preparing graduates not just to adapt to the evolving healthcare landscape but to shape its future.

Innovative curriculum

The curriculum is based on an integrative approach that utilizes active learning experiences, with occupation as the core subject to prepare students for the future of practice.

Innovations in practice

Students are trained on the use of innovative practices promote health and well-being for clients in a way that pushes occupational therapy forward.

Fieldwork

Students take the theoretical and hands-on skills that they've learned in the classroom and apply them to real clients in the context of authentic practice environments.

Fieldwork opportunities provide students with the ability to:

- Discover the client's occupational performance needs through evaluation and assessment
- Plan, develop, and execute occupation-based interventions
- Identify opportunities for innovation, advocacy, and leadership development in practice

Level I Fieldwork

- Aligns with the material being taught in the respective trimester
- Serves as an opportunity for students to experience selected portions of occupational therapy process
- Placements include hospitals, schools, skilled nursing facilities, outpatient clinics, community-based programs, and simulation

Level II Fieldwork

- Students master skills needed to transition from the role of a student to that of an entry-level practitioner

Students learn foundational therapeutic skills in traditional settings while also exploring opportunities in non-traditional, role-emerging, and innovative practice areas. students are challenged to explore ways to bridge innovation with traditional therapeutic settings through the infusion of whole-person care, lifestyle medicine principles, and innovative practice skills.

Capstone

The 14-week doctoral capstone is an in-depth experiential learning opportunity that develops advanced skills in:

- Clinical practice skills
- Research
- Program or policy development
- Leadership
- Advocacy
- Administration
- Education
- Theory development

Students identify capstone areas of interest that align with their professional goals, and are paired with a faculty mentor and a community site to collaboratively develop a plan for their doctoral capstone.

Where can your OTD degree take you?

The demand for occupational therapy is projected to grow by 17% between 2020 and 2030.

Occupational therapists work with people of all ages, with varying levels of abilities and conditions. Occupational therapists work in hospitals, long-term care facilities, schools, clinics, behavioral health settings, and community-based settings, allowing graduates to find new ways to make a difference in others' lives.

Accreditation Status: The entry-level occupational therapy doctoral degree program has been granted Preaccreditation Status by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 7501 Wisconsin Avenue, Suite 510E, Bethesda, MD 20814. ACOTE's telephone number c/o AOTA is (301) 652-AOTA and its web address is acoteonline.org.
The program must complete on-site evaluation and be granted Accreditation Status before before its graduates will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. A felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/otd

Contact us

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KGI SCHOOL OF PHARMACY AND HEALTH SCIENCES

2025-26 Academic Catalog/Class of 2028 Graduation Requirements

Occupational Therapy Doctorate (OTD)

Students in the OTD program are required to complete a minimum of 126.50 units over two years and eight months of study. The coursework is comprised of required courses, elective courses, and a capstone. Included in the required 126.50 total units, students must complete four Level I fieldwork rotations (160 hours), two Level II fieldwork rotations (24 weeks, full-time), and a Doctoral Capstone Experience the length of the doctoral capstone experience is a minimum of 14 weeks' full-time, and a minimum of 32 hours per week).

Program Requirements

1st Year FALL Core Courses	Credits
OCTH 6100 Foundations of Occupational Therapy and Occupational Science	3.0
OCTH 6110 Lifestyle, Health Equity, and Occupational Justice	2.0
OCTH 6120 Anatomy, Physiology, and Movement for Occupational Participation	4.5
OCTH 6130 Psychosocial Occupational Therapy: Frameworks and Evaluation	3.0
OCTH 6140 Psychosocial Occupational Therapy: Intervention and Outcomes	3.0
OCTH 6150 Introduction to Fieldwork	1.0
OCTH 6160 Introduction to Capstone	1.0
OCTH 6180 Fieldwork Level IA	1.0
Subtotal	**18.5**

Program Requirements

1st Year SPRING Core Courses	Credits
OCTH 6200 Neuroscience for Occupational Participation	4.0
OCTH 6220 Therapeutic Use of Occupation	2.0
OCTH 6230 Adult and Older Adult Occupational Therapy I: Frameworks and Evaluation	3.0
OCTH 6240 Adult and Older Adult Occupational Therapy I: Interventions and Outcomes	3.0

1st Year SPRING Core Courses	Credits
OCTH 6250 Research and Evidence in Occupational Therapy Practice I	3.0
OCTH 6260 OT Practitioner as Educator, Contemporary Leader, and Manager	3.0
OCTH 6280 Fieldwork Level IB	1.0
Subtotal	**19.0**

Program Requirements

1st Year SUMMER Core Courses	Credits
OCTH 6330 Adult and Older Adult Occupational Therapy II: Frameworks and Evaluation	3.0
OCTH 6340 Adult and Older Adult Occupational Therapy II: Intervention and Outcomes	3.0
OCTH 6350 Research and Evidence in Occupational Therapy Practice II	3.0
OCTH 6380 Fieldwork Level I C	1.0
OCTH 6390 Capstone Exploration	3.0
Subtotal	**13.0**

Program Requirements

2nd Year FALL Core Courses	Credits
OCTH 7400 Advocacy, Policy, and Ethics	1.5
OCTH 7410 Pharmacotherapeutics for Occupational Participation	1.5
OCTH 7430 Pediatric Occupational Therapy I: Frameworks and Evaluation	3.0
OCTH 7440 Pediatric Occupational Therapy I: Intervention and Outcomes	3.0
OCTH 7450 Research and Evidence in Occupational Therapy Practice III	3.0
OCTH 7480 Fieldwork Level I D	1.0
OCTH 7490 Innovative Program Development & Entrepreneurship	3.0
OCTH 74XX Electives (2) TBD	1.5 (3.0)
Subtotal	**17.5 (19)**

Program Requirements

2nd Year SPRING Core Courses	Credits
OCTH 7500 Lifestyle Medicine, Health, and Occupational Therapy	3.0
OCTH 7510 Assistive Technology and Innovation for Everyday Life	3.0
OCTH 7530 Pediatric Occupational Therapy II: Frameworks and Evaluation	3.0
OCTH 7540 Pediatric Occupational Therapy II: Intervention and Outcomes	3.0
OCTH 7585 Fieldwork Seminar	0.5
OCTH 7590 Capstone Development	2.5
OCTH 75XX Electives (2) TBD	1.5 (3.0)
Subtotal	**16.5 (18)**

Program Requirements

2nd Year SUMMER Core Courses	Credits
OCTH 7680 Fieldwork Level IIA	12.0
Subtotal	**12.0**

Program Requirements

3rd Year FALL Core Courses	Credits
OCTH 8700 Occupational Therapy Professional Transitions	2.0
OCTH 8780 Level IIB Fieldwork	12.0
Subtotal	**14.0**

Program Requirements

3rd Year SPRING Core Courses	Credits
OCTH 8890 Doctoral Capstone Experience	14.0
OCTH 8895 Capstone Project	2.0
Subtotal	**16.0**

Fieldwork experiential learning courses will take place off-campus in a variety of community-based and healthcare sites, as well as on-campus for simulated learning experiences.

Level I Fieldwork – Level IA, IB, and IC will take place during the first year. Level ID will take place in the student's second year of the program. The Level I Fieldwork experiences will provide students with 160 clinical hours.

Level II Fieldwork – Level II fieldwork is experiential learning that will take place off-campus in a variety of community-based, psychosocial, and healthcare sites. Level IIA fieldwork will occur in the last trimester of the student's second year. Level IIB will occur in the first trimester of the student's third year. Level II fieldwork experiences are 12 weeks each, following a full-time, site-determined schedule. Exact clinical hours may vary depending on the site.

Doctoral Capstone Experience (DCE) – The DCE is completed during the final trimester of the program at a community partner site. The length of the doctoral capstone experience is a minimum of 14 weeks full-time, and a minimum of 32 hours per week.

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SOP Program Information and Graduation Requirements

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Doctor of Pharmacy (PharmD) Program Sheet and Graduation Requirement

KGI KECK GRADUATE INSTITUTE

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SCHOOL OF PHARMACY

Doctor of Pharmacy

PharmD

The Doctor of Pharmacy (PharmD) program at Keck Graduate Institute offers an innovative and comprehensive education designed to prepare you for a diverse career in pharmacy and healthcare. With a focus on personalized education, interdisciplinary collaboration, and hands-on clinical experience, KGI's PharmD program equips graduates to excel in community pharmacy, hospital settings, industry roles, regulatory affairs, and beyond. Our PharmD program offers a unique, supportive learning environment, an innovative curriculum, and a commitment to fostering leaders who make a meaningful impact on patient care and the healthcare system.

Why should you consider this program?

Tap into exceptional industry connections

As a student at KGI, you'll enjoy unrivaled access to a robust professional network that reaches all corners of the pharmaceutical and biotechnology industries—you'll be encouraged to leverage these connections in both your coursework and your career growth.

Certificates in your preferred area of emphasis

In addition to your Doctor of Pharmacy degree, you'll leave KGI with a certificate in one of three specialties: Healthcare Management/Pharmacy Informatics (HCM/PI), Medical and Clinical Affairs (MCA), and Medication Therapy Outcomes (MTO).

Prepare to hit the ground running

During your time at KGI, you'll acquire the knowledge, skills, and—most importantly—confidence required to be a practice-ready pharmacy professional the moment you graduate.

Enjoy support in all areas

In addition to extensive scholarship opportunities, you will benefit from a wide range of support systems that help KGI stand apart such as professional networking, job interview coaching, pharmacy-focused student organizations.

What does the curriculum look like?

Your coursework at KGI will be as diverse as the evolving range of career opportunities within the pharmacy industry. In addition to the basic sciences, you will receive instruction that focuses on clinical skills, emerging topics, and professional development. In sum, yours will be an experiential education that provides you with everything needed to thrive in pharmacy.

Will my degree come with a specialty?

On top of your Doctor of Pharmacy, you will graduate with a certificate in one of three specialty areas.

Healthcare Management/Pharmacy Informatics (HCM/PI)

Pursuing this certificate enables you to develop the analytical and problem-solving skills required to enhance the patient experience through the application of healthcare and management technology.

Medical and Clinical Affairs (MCA)

The MCA certificate program teaches you to provide strategic direction within the operation of medical affairs, thereby expediting the development and delivery of healthcare products that are as safe as they are effective.

Medication Therapy Outcomes (MTO)

If you're interested in caring for patients in rural settings, Medication Therapy Outcomes is for you. This certificate teaches you the skills needed to treat underserved populations across the continuum of care.

Why should I choose KGI for my Doctor of Pharmacy?

As a graduate from KGI, your career opportunities extend beyond pharmacy into research, fellowships, and corporate roles within the pharmaceutical and biotech industries. This breadth of opportunity exists because KGI's Doctor of Pharmacy program emphasizes a wide range of coursework, extensive professional networking, and regular interaction with visiting industry thought-leaders.

Details, Deadlines, & Next Steps

General Requirements

- Completed online app (diff for CAS)
- Personal statement
- Resume/CV
- Letter of Recommendation
- Official Transcripts
- Admissions Interview
- Fee (varies by program)

For more information about dates and fees, please visit kgi.edu/pharmd

Contact us

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KGI SCHOOL OF PHARMACY AND HEALTH SCIENCES

2025-26 Academic Catalog/Class of 2029 Graduation Requirements

Doctor of Pharmacy (PharmD)

Students in the PharmD program are required to complete a minimum of 148 units over the course of four years of study. The coursework is comprised of required courses, elective courses, and capstone. Included in the required total units, students must complete 8 rotations. These include 3 Introductory Pharmacy Practice Experience (IPPE) rotations for a minimum of 320 hours, and an additional 6 Advanced Pharmacy Practice Experience (APPE) rotations, for a minimum of 1,440 hours.

Program Requirements

1st Year FALL Core Courses	Units
PHAR 5310 Pharmaceutics and Biopharmaceutics	3.0
PHAR 5311 Pharmaceutical Calculations	2.0
PHAR 5315 Principles of Drug Action	4.5
PHAR 5325 Integrated Series 1 – Introduction to Pharmacy Practice	5.0
PHAR 5332 Biostatistics	2.5
PHAR 5350 Professional Development Series 1	1.0
PHAR 5360 Recitation 1	1.0
Subtotal	**19.0**

1st Year Spring Core Courses	Units
PHAR 5318 Pharmacokinetics	3.0
PHAR 5321 Pharmacy Law and Ethics	2.0
PHAR 5335 Integrated Series 2 – Endocrinology and Urology	5.0
PHAR 5342 Drug Information, Study Design, and Literature Evaluation	2.0
PHAR 5351 Professional Development Series 2	1.0
PHAR 5365 Recitation 2	1.0
PHAR 5370 Introduction to Industry	2.0
PHAR 5375 Pre-IPPE Readiness and Patient Assessment	3.0
Subtotal	**19.0**

KGI SCHOOL OF PHARMACY AND HEALTH SCIENCES

Program Requirements

2nd Year FALL Core Courses	Units
PHAR 6420 Pharmacy Management	2.0
PHAR 6425 Integrated Series 3 – Cardiology	6.5
PHAR 6430 Introduction to Pharmacy Informatics	2.0
PHAR 6435 Integrated Series 4 – Nephrology	3.0
PHAR 6450 Professional Development Series 3	1.0
PHAR 6460 Recitation 3	1.0
PHAR 6471 IPPE 1 – Community Pharmacy Practice	4.5
Subtotal	**20**

2nd Year Spring Core Courses	Units
PHAR 6411 Sterile Products	1.0
PHAR 6421 Pharmacoeconomics and Pharmacovigilance	2.0
PHAR 6428 Population Health	2.0
PHAR 6445 Integrated Series 5 – Immunology, Rheumatology, and Dermatology	4.0
PHAR 6455 Integrated Series 6 – Infectious Disease	6.0
PHAR 6451 Professional Development Series 4	1.0
PHAR 6465 Recitation 4	1.0
Subtotal	**17**

Program Requirements

3rd Year FALL Core Courses	Units
PHAR 7515 Integrated Series 7 – Neurology and Psychiatry	7.0
PHAR 7525 Integrated Series 8 – Gastroenterology	4.0
PHAR 7552 Pre-APPE Readiness 1	2.0
PHAR 7560 Recitation 5	1.0
PHAR 7571 IPPE 3 – Health Systems Pharmacy Practice	3.0
Didactic Certificate Courses	4.5-6.0
Subtotal	**21.5-23**

3rd Year Spring Core Courses	Units
PHAR 7536 Integrated Series 9 – Hematology, Oncology, Pulmonology and Ophthalmology	5
PHAR 7553 Pre-APPE Readiness 2	2.0
PHAR 7565 Recitation 6	1.0
Didactic Certificate Electives	4.5- 6.0
Subtotal	**12.5-14**

KGI SCHOOL OF PHARMACY AND HEALTH SCIENCES

Program Requirements

4th Year Courses	Units
PHAR 8600 Advanced Community Practice APPE	6
PHAR 8601 Advanced Health-System Practice APPE	6
PHAR 8602 Ambulatory Care APPE	6
PHAR 8603 General Medicine APPE	6
PHAR 8620-8659, 8690 Elective APPE	6
PHAR 8672-8675 Certificate APPE	6
PHAR 8640 Pharmacy Capstone Seminar	1.5
Subtotal	**37.5**

IPPE/APPE = Introductory Pharmacy Practice Education/Advanced Pharmacy Practice Education – courses that are designated experiential and will take place off campus in a variety of pharmacy practice settings.

Introductory Pharmacy Practice Experiences (IPPE rotations)
Includes three rotations that will take place during the second (P2) and third (P3) year.

The IPPE rotations will provide the students with at least 320 hours. More than 50% of the IPPE hours are in community and institutional sites.

Advanced Pharmacy Practice Experiences (APPE rotations)
APPE rotations take place during the fourth (P4) year.

In total, six APPE rotations are required in the program and will take place during the fourth professional (P4) year. (At least 5 APPEs must focus on patient care.) All six APPEs will provide the students with a total of 1,440 hours of practice experience during the PharmD program (40 hours/week for 6 weeks for 6 rotations).

PharmD Certificates

PharmD graduates will earn a certificate in one of the following three options: Healthcare Management/Pharmacy Informatics (HCM/PI), Medical and Clinical Affairs (MCA), or Medication Therapy Outcomes (MTO). Shown below are the required core and elective courses to successfully complete each certificate. In addition to the 9.0 credit hours required for each certificate, HCM/PI and MCA students must complete an additional MTO course (1.5 credit hours). In addition to the didactic electives, students will take two certificate-related APPE electives totaling 12 credits.

Healthcare Management/Pharmacy Informatics (HCM/PI)
The HCM certificate program offers management training, healthcare technology, and experience in dynamic healthcare settings. The curriculum emphasizes analytical and problem-solving skills in conjunction with a deep understanding of the healthcare environment. In addition to the core and elective courses, HCM/PI students are required to take one MTO elective course (1.5 units).

Healthcare Management/Pharmacy Informatics (HCM/PI)	Units
PHAR 7513 Healthcare Finance and Reimbursement	1.5
PHAR 7546 Healthcare Delivery Science & Medication Safety	1.5
PHAR 7542 Applying Technology to the Medication Use Process	3.0
Total	**6.0**

Preferred electives totaling 3 units include: BUS 5000; BUS 5200; BUS 6400; MATH 5200; PHAR 7563; and other courses upon the recommendation of the certificate coordinator.

Medical and Clinical Affairs (MCA)
The MCA certificate program will provide student pharmacists with the skills needed to provide strategic, tactical, and operational direction within regulations to expedite the development and delivery of safe and effective healthcare products. In addition to the core courses, MCA students are required to take one MTO elective course (1.5 units).

Medical and Clinical Affairs	Units
BUS 5000 Introduction to the Biosciences Industries (ALS 359)	3.0
REG 6510 Design of Clinical Trials, Conduct, and Strategy (ALS 433)	1.5
PHAR 7563 Fundamentals of Medical Affairs	1.5
PDEV 5000 Team Masters Project	3.0
Total	**6.0**

Medication Therapy Outcomes (MTO)
The MTO certificate program provides opportunities to develop skills to provide care for patients in multiple care-based settings, from underserved populations, in accountable care organizations, and throughout the continuum of care process. Students selecting the MTO certificate are required to complete 7.5 credit hours from the list below in addition to elective courses (3 units).

Medication Therapy Outcomes (MTO)	Units
PHAR 7581 Advanced Topics in Drug Interactions	1.5
PHAR 7582 Critical Care	1.5
PHAR 7587 Nutrition Support	1.5
PHAR 7590 Oncology	1.5
PHAR 7593 Cardiology	1.5
Subtotal	**7.5**

Preferred electives totaling 3 units include: any HCM/PI or MCA certificate core course; GENE 5040; GENE 5290; and other courses upon the recommendation of the certificate coordinator.

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Course Catalog

KECK GRADUATE INSTITUTE
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BDEV 5100

Professional Development

School: KGI BioCon Academy

Course Credit: 0.0

Terms Offered: N/A

Pre-requisites: N/A

In workshops and a selection of modules, students learn how to build their professional presence, gain insight into the process and timing of finding employment, learn skills that will improve their competitiveness, and develop expertise at showcasing their accomplishments.

BENG 5120

Fermintation Principles

School: KGI BioCon Academy

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: Biocon Academy students only

Fermentation as a part of the bioprocess industry makes use of the microbial, animal and plant cells, and components of cells such as enzymes to manufacture enormous range of commercial products from relatively cheaper material such as industrial alcohol and organic solvents to expensive specialty chemicals such as antibiotics, therapeutic proteins and vaccines. The advancement and development of the fermentation process have led to the manufacturing of recombinant DNA derived products such as insulin, human growth hormone and interferon. The knowledge and skills required to turn these products into commercial reality requires working with various interdisciplinary scientists and engineers to develop the necessary platforms from genetic manipulation and cell line development to scaling up the process to a pilot scale bioreactor and eventually industrial scale operations. This course will focus on both the fermentation processes and the principles of bioprocessing engineering through a series of lectures, presentations and case studies.

BENG 5130

Mammalian Cell Biotechnology

School: KGI BioCon Academy

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Biocon Academy students only

Mammalian cell biotechnology has undergone explosive growth over the last 30 years. Bioscientists skilled in mammalian cell biotechnology are in high demand. The primary goal of this course is to provide students with an advanced background in mammalian cell biotechnology. The scientific, engineering, and practical industrial aspects will be presented through a series of lectures and student presentations. This course will focus on both the fermentation processes and the principles of bioprocessing engineering through a series of lectures, presentations and case studies. Students should have a background in chemistry, biological science or a related discipline.

BENG 6140

Bioseparation Engineering and Science

School: KGI BioCon Academy

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Biocon Academy students only

Bioprocess engineering, including bioseparations, was and often still is a major skill set of professionals like brewers, winemakers, or in ancient times, wizards or sorcerers. Success in large-scale recombinant protein manufacturing is a recent manifestation of a long and glorious history of the field. The primary goal of this course is to provide students with an advanced background in bioseparations science and engineering. Graduates in molecular biology, bioengineering, and many other fields can potentially take advantage of opportunities in pharmaceutical biotechnology, biotechnology development, manufacturing, commercial operations, quality assurance, regulatory affairs, business development, licensing, and investment fund management. To access such opportunities quickly and successfully, it is valuable to understand the basic principles of bioprocess engineering and to have an advanced background in a subspecialty or application area, such as fermentation, cell culture, and/or bioseparations. This type of knowledge and experience can be applied to a career in pharmaceutical biotechnology, and to other areas of biotechnology, such as biofuels.

BREG 5000

Introduction to US FDA and European Laws and Regulations

School: KGI BioCon Academy

Course Credit: 1.5

Terms Offered: All Terms

Pre-requisites: Biocon Academy students only

This course will provide students with broad general competencies in regulatory affairs for all US FDA regulated product classes (drugs, biologics, and devices) throughout the product lifecycle (pre-clinical development, clinical development, and post marketing). Emphasis will be placed on regulatory interactions, submissions, other communications and inspections, for each product class and for each phase of the product lifecycle. European regulations will also be reviewed. This course is designed to provide a broad overview of the United States regulatory system, with some European Union structure and regulation highlights. Students will gain a basic understanding of how the FDA regulates the approval of various products and how this has changed over time, as well as the necessary inputs companies must

be aware of when applying for regulatory approvals in the USA.

BREG 5311

Biopharmaceutical Quality Assurance and Control

School: KGI BioCon Academy

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: Biocon Academy students only

Production of biotechnology products requires comprehensive quality standards and systems that meet global cGMP expectations and are based upon thorough scientific knowledge of the product and process. Professionals knowledgeable in the principles and practice of biopharmaceutical quality management are in high demand and hold positions of significant responsibility within the private and public sectors of the healthcare industry.

BREG 6310

CMC Regulations of Pharmaceuticals

School: KGI BioCon Academy

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Pre-req: REG 5310

Regulatory Chemistry, Manufacturing and Control (CMC) requirements determine the strategy parameters for new pharmaceutical process development and changes post approval. Knowledge of CMC requirements and relevant agencies is a key success factor in pharmaceutical approval and compliance. In particular, globalization has caused a significantly more complex regulatory environment for the manufacture and distribution of pharmaceuticals (and medical devices). Most product supply chains are now multinational with increasing trends towards investment in rapidly developing but poorly regulated nations. The development of regulatory strategies for product development and post approval changes requires the understanding of many national regulatory agencies and international harmonization efforts. The advent of Biosimilars will place increased emphasis on CMC product characterization and process comparability and/or interchangeability as the key criteria for introduction of generic biologics.

BSCI 5000

Molecular Biotechnology

School: KGI BioCon Academy

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Biocon Academy students only

In this module, students will be exposed to the conceptual foundations of biotechnology and the role played by discoveries and applications of molecular biology principles in advancing biotechnology horizons. This is a case-based course in which students learn about landmark original papers and patents that shaped biotechnology. Upon completion of this course, students will gain an understanding of the concepts and techniques that are currently being used in the biotechnology and pharmaceutical industry.

BSCI 5310

Pharmaceutical Drug Development

School: KGI BioCon Academy

Course Credit: 1.5

Terms Offered: All Terms

Pre-requisites: Biocon Academy students only

The development of regulatory strategies for product development and post approval changes require the understanding of many national regulatory agencies and international harmonization efforts. Often the introduction of product production and distribution improvements is limited by the effectiveness of the Chemistry, Manufacturing and Control (CMC) regulatory strategy employed by the firm.

BUS 5000

Introduction to Bioscience Industries

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The course will introduce students to industry dynamics within the bioscience industries, with a particular emphasis on commercialization dynamics and entrepreneurship. We will examine industry dynamics within different segments of the life science industries, such as therapeutics, diagnostics, and medical devices. Students will learn to evaluate common business models employed by life science firms, and will learn how to employ a variety of analytical tools used to assess the attractiveness of a variety of life science marketplaces. Common tools used for market research, such as survey methods and qualitative interview based techniques, will be introduced. The course will introduce these topics to students through case studies of bioscience firms.

BUS 5100

Financial Accounting

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

This course is to provide students with the fundamentals needed to identify, interpret and analyze most common financial statements. The course approaches financial accounting from the perspective of data users (e.g., stock analysts, investors, financial managers) and not data providers (e.g., accountants, auditors, corporate controllers). Therefore, while giving an overview of the accounting processes where financial statement information originates, the course focuses on using the reported financial accounting information to evaluate company performance and financial health.

BUS 5110

Corporate Finance

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course will allow students to develop a basic understanding of financial decision making. Students will be exposed to the underlying framework of corporate finance including valuation, market efficiency and portfolio theory. The course will survey a set of special topics that includes early venture financing and IPO's.

BUS 5200

Healthcare Economics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

This course provides a brief introduction to how economic principles explain the allocation of resources in the healthcare system. This will include both general principles and recent efforts (both successful and failed) at improving the efficiency and effectiveness of healthcare delivery.

BUS 5300

Competitive Strategy

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course focuses on how firms can create and sustain advantages in highly competitive business environments. We will learn analytical frameworks and techniques for evaluating business situations and developing strategies to improve organizational performance. Students will adopt the perspective of a general manager (e.g., of a business unit, a plant, a region, a division, a product line, or an entire company) focused on long-term profitability. We will answer questions typically addressed by senior corporate executives. You will be prepared to anticipate the most likely concerns of senior executives who will be your clients or who will supervise your work. To achieve this overarching objective, this course will include lectures, case discussions, and group presentations. While lectures aim to elaborate on key theoretical models and frameworks, case discussions will provide hands-on experiences on how business decisions are made in real life. We will discuss a wide range of companies and industries, with an emphasis on the biotech and pharmaceutical industries.

BUS 5500

Business Research Design and Analytics in Life Science

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: N/A

This course provides a comprehensive exploration of business research design and analytics specifically tailored for the dynamic field of life sciences. It equips students with the essential knowledge and skills to conduct rigorous research, analyze data effectively, and derive actionable insights to drive strategic decision-making within pharmaceutical, biotechnology, and healthcare organizations.

BUS 6110

Bioprocess Economics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: Pre-req: BUS 5100

This course provides students with the fundamentals necessary to understand and contribute to financial assessments for biopharmaceutical processes, technologies, and infrastructure. The course will cover the basic calculations used in financial strategy, analysis, and executive decision making, as well as review best-practices for engineers to contribute meaningfully to these assessments in an industry setting. A student successfully completing this course will understand cost assessment, net present value analysis, cash flow principles, sensitivity analysis, modeling, and application of these principles in informing company leadership.

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BUS 6120

Valuation in the Life Sciences

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: Pre-reqs: BUS 5100, BUS 5110

Most valuation courses focus on the valuation of a firm, however, in this course students will learn to address the issues of valuation, which are created by the limited exclusivity periods (patent protection) typical for intellectual property.

BUS 6210

Advanced Healthcare Economics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: Pre-req: BUS 5200

This course provides deeper understanding of economic principles to analyze healthcare market. Specifically, it explains and predicts the behavior of healthcare providers. Topics covered in this course include: cost curves to produce healthcare, physician and hospital market, PPACA and changes in healthcare delivery, market failure and the role of government, reimbursement system in pharmaceutical market, and international healthcare system.

BUS 6220

Drug Pricing and Reimbursement

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: N/A

This course will provide an overview of the elements of pharmaceutical pricing and reimbursement. Students will gain an understanding of basic pharmaceutical pricing principles and the unique constraints of private and public reimbursements. The course will focus on the role of value in pharmaceutical pricing, the role of price and reimbursement in medical decision making, and the implications for payers, physicians, and patients.

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BUS 6230

Global Health Policy

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

Despite tremendous advances in medical technology have occurred over the last few decades, many individuals face limited access to medicines. This course provides an introduction to global health policy, focusing particular attention on examining different public policy perspectives oriented towards creating drugs for neglected diseases. We will explore how the creation of global value chains has created opportunities to develop new and perhaps more effective policies to lessen the long-standing global health problems. We will also examine the role of pharmaceutical and biotechnology companies within global health policy initiatives, paying particular attention to market oriented policies and public-private partnerships. Finally, we will examine the role of social entrepreneurs in creating innovative solutions for global health problems.

BUS 6310

International Business

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

This course will expose students to global marketplace issues within the life sciences. Students will be equipped with conceptual frameworks such as CAGE and AAA to effectively understand international strategy issues within different regions of the world, including advanced economies in Europe and rapidly emerging marketplaces such as China and India.

BUS 6320

Managing Strategic Alliances

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: N/A

Strategic alliances are essential for firms to broaden their business scopes, maintain their sustainability and improve their competitiveness. The objective of this course is to help students understand the issues

related to managing cooperation with other organizations. Business cases are selected to cover alliances in a variety of contexts.

BUS 6330

Intellectual Property Strategy

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: N/A

Intellectual property (IP) rights are economically necessary to provide private actors the incentive to create and commercialize inventions. IP is particularly important for human therapeutics, where the temporary monopoly of a patent is essential for raising the money needed to complete clinical trials. This course reviews the nature and limitations of the various forms of IP and how firms leverage such IP to obtain competitive advantage and improved profitability.

BUS 6400

Organizational Behavior

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The focus of this course is on the scientific study of behavioral processes in organizations. It highlights critical management issues involved in planning, organizing, controlling, and leading an organization. This course aims to strengthen students managerial potential by providing general frameworks, or foundations, for analyzing, diagnosing, and responding to complex organizational situations.

BUS 6410

Leadership in Organizations

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

Leadership is one of the most researched management phenomena and perhaps the most vigorously sought ability in a business context. This course focuses on the large body of findings and practical

frameworks in leadership at multiple levels in an organization. Rather than recommending the "one best way" to lead others, this course aims to facilitate students' understanding of the pros and cons of different styles and methods of leadership. This course will also highlight how leadership can help teams/groups function at a high-level by motivating followers to be effective organizational citizens.

BUS 6500

Marketing Management

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course focuses on marketing and its role within organizations. It introduces the marketing concept, examines its relationship to other functions in the firm and looks at techniques and frameworks used to examine marketing environments, understand consumer and organizational buying behavior, segment markets and position products, develop new products, manage existing products and promote, price and place products.

BUS 6510

Design Thinking

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: N/A

The course will introduce students to the concepts and applications of Design Thinking. It is a human-centered, multidisciplinary approach to help individuals, teams, and organizations innovate and grow. We will examine the Design Thinking process that can be applied to the development of both new products and new services, as well as the improvement of existing ones. Students will learn the basics of innovation and how Design Thinking could be applied as a powerful tool to uncover opportunities for new products/services, not only from the target customers but also from related stakeholders such as suppliers, manufacturers, maintenance, after-sales, etc. Students will learn to evaluate and approach new product/service development from a systemic and holistic view.

BUS 6600

Business Operations

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Operations Management is concerned with the production and delivery of goods and services to meet customers' demands. It is one of the central functions of every business, government agency, and non-profit organizations.

BUS 6610

Supply Chain Biotech Operations

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course provides an overview of the set of activities related to the flow of information, goods, and services, from raw material thorough production to the end-use customer. Emphasis will be placed on the application of business strategies that minimize waste, including green supply chain principles. We will also analyze and contrast traditional voice of the customer reasoning versus an emerging way of thinking about supply chains that focuses on the voice of the environment. Although the supply chain principles covered in the course apply to many industries, the focus of the applications will be in the area of applied life sciences, including bioprocessing, pharmaceuticals, and medical device manufacturing. This focus will be accomplished using industry-specific case studies and journal articles. Specific topics include: cold chain management and supply chain security, make versus buy and vertical integration, closed-loop supply networks (including green value streams) the impact of technology on outsourcing practices, inventory management models, inventory turn rate and velocity, reverse logistics.

BUS 6730

Applied Entrepreneurship

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Second year students or permission of faculty.

The focus of this course is on the concepts and practice of creating a new business. The course has many components in our attempts to make it realistic and useful, and these can be collected into two major categories: identifying and evaluating business opportunities, and conceiving, writing, executing and defending a business plan.

CAG 9001

Applied Genomics - Translating Concept to Clinic

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Summer Terms

Pre-requisites: N/A

Translating Concepts to Clinic will survey the exciting recent developments in human genomics, from advances in DNA and RNA sequencing technology and clinical diagnostics to genetic engineering and gene therapies. This course will not only discuss the science behind the headlines, but also dive into the data analysis challenges and ethical considerations that the rapidly changing field poses. Participants will explore what is happening in the fields of clinical and applied genomics today and discuss emerging technologies and treatments on the horizon.

CAG 9010

Human Genetic Variation and Disease

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: CAG 9001 or permission from instructor

Human Genetic Variation and Disease will be an in-depth study of the effect DNA variation can have on human health. The types of DNA variation which will be studied include: single nucleotide variants (SNVs), structural variants (SVs) including copy number variants (CNVs), triplet repeat expansions and methylation abnormalities. This course will discuss the impacts of these variants on human health as it relates to genetic conditions from the prenatal setting to adulthood. Topics covered will include clinical presentation, etiology, diagnosis and treatment (if available) of genetic conditions, as well as the technologies used to detect DNA disease-causing variants. Ethical considerations of genetic testing will also be discussed.

CAG 9011

Clinical Genetics: Actionability and Genome Editing

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Clinical Genetics: Actionability and Genome Editing will explore how genetic and genomic information can impact the medical management of patients, both now and possibly in the near future. The course will explore how genetic diagnostic products are designed, validated, and approved and the uses of whole genome, whole exome, and targeted sequencing approaches in clinical settings. The course will also discuss the role of precision therapeutics and pharmacogenomics in patient care. Lastly, participants will explore the utility of gene therapy and genome editing, including ethical and regulatory considerations.

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CAG 9021

Epigenomics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Epigenomics will explore the dynamic world of chromatin, from DNA methylation to histone modifications to topologically association domains. The course will study how epigenetic modifications can be used to understand and predict phenotype, such as gene regulation and inheritance patterns. Participants will also discuss how functional genomic approaches are used to understand disease etiology and risk and how the epigenome can be modified as a therapeutic strategy. Lastly, this course will consider the challenges of visualizing genome-wide datasets and explore the use of genome browsers in genomic analysis.

CAG 9090

Applied Genomics Capstone

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: All Terms

Pre-requisites: Pre-req: CAG 9001, CAG 9010, CAG 9011, CAG 9021

The Applied Genomics Capstone will allow participants to design a project of personal or professional interest to answer an open question in applied genomics in order to demonstrate skills and knowledge acquired during the certificate program. Upon completion, participants will prepare a short oral presentation and a written capstone paper to summarize their methods, results, and conclusions.

ENG 5100

Bioprocess Engineering Principles

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: Pre-req: ENG 5160

Graduates in molecular biology, bioengineering, and many other fields can potentially take advantage of many exciting and lucrative career opportunities in biotechnology development, manufacturing, commercial operations, business development, licensing, and investment fund management.

ENG 5110

Statistical Methods and Experimental Design in Bioprocessing

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term

Pre-requisites: N/A

The proposed course provides students with a foundational understanding of statistical principles and data analysis techniques tailored to bioprocessing applications. Emphasizing practical use of statistical software (JMP), the course covers hypothesis testing, ANOVA, regression analysis, and core Design of Experiments (DoE) methodologies including full factorial, fractional factorial, and response surface designs such as Box-Behnken. Students will also be introduced to multivariate data analysis tools such as Principal Component Analysis (PCA) and Partial Least Squares (PLS) to address complex datasets. Through case studies and bioprocess-specific examples, students will gain hands-on experience in interpreting results, translating data into actionable insights, and effectively communicating findings to scientific teams in industrial settings.

ENG 5120

Microbial Fermentation

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1
Pre-requisites: Pre-req: ENG 5100

Bioprocessing is a technology used in a variety of industries. This course will provide an overview of various industrial uses of microbial bioprocessing. The course will present bioprocessing in industries ranging from the food and pharmaceutical industries to the chemical and green-tech industries. The course is designed to teach students the basic fundamentals of a bioprocess and what they need to know about the similarities and the unique aspects of bioprocessing in each industry covered.

ENG 5121

Microbial Fermentation Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Pre-req: ENG 5120

Microbial fermentation generates products for every facet of life. The technology is used in the food,

pharmaceutical, biologics, enzyme, and green technology industries, as a few examples. This course will provide students with hands-on experience setting up, operating and analyzing fermentations. Students will learn how to conduct growth studies in shake flasks and in a fermentor, induce protein production and perform assays to measure growth and product yields. Experiments will be conducted with a microbial strain expressing a protein. Good documentation is key for regulated industries and will be a key feature for assessing student performance in the course. Students will keep accurate detailed experimental plans, lab notebooks, batch records, analysis results and experimental reports. Teams will give oral presentations of their results and participate in group discussions comparing the different results.

ENG 5130

Mammalian Cell Biotechnology

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: Pre-req: ENG 5100 concurrent

Mammalian cell biotechnology has undergone explosive growth over the last 30 years. Persons skilled in mammalian cell biotechnology are in high demand. The primary goal of this course is to provide students with an advanced background in mammalian cell biotechnology. The scientific, engineering, and practical industrial aspects will be presented through a series of lectures and student group presentations.

ENG 5131

Mammalian Cell Culture Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: N/A

Pre-requisites: Pre-req: ENG 5130 concurrent

This laboratory course provides extensive hands-on experience in lab-scale pilot plant for animal cell culture (part of the Amgen Bioprocessing Center). The pilot plant includes several 2-L glass bioreactors plus various single use systems, all run as scale-down models of large scale (25,000-L) systems. The course includes not only laboratory exercises and written reports, but also certain weekly classes wherein students will receive additional instruction, occasionally give presentations on their results, and see talks and demonstrations by vendors on their latest technologies.

ENG 5132

Introduction to Upstream Processing Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Pre-req: ENG 5100

This comprehensive course aims to provide students with a thorough understanding of microbial and mammalian upstream bioprocessing as used in industrial settings. Throughout the course, students will learn about the nutrient requirements of cells and how to formulate media to support optimal growth and production. The course also covers enzyme kinetics, metabolic regulation, bioenergetics, and metabolic pathways, which are critical factors in understanding and manipulating cellular processes. Moreover, students will study growth kinetics, exploring the factors that influence cell growth and productivity. They will also gain knowledge about recombinant DNA technology. Inoculum preparation, another crucial aspect of bioprocessing, will be covered to ensure students understand the importance of starting with a viable cell population for industrial production.

ENG 5133

Introduction to Upstream Processing Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

By focusing on these fundamental concepts, the course provides students with a strong foundation in upstream bioprocessing. This knowledge will serve as a springboard for further exploration in the Advanced Upstream Processing course, where students can delve deeper into advanced techniques and methodologies used in the field.

ENG 5134

Advanced Upstream Processing Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: Pre-req: ENG 5133

This laboratory course provides extensive hands-on experience in the lab-scale facility for mammalian cell culture in conjunction with the theoretical course ENG 6132 Advanced Upstream Processing/ENG 5132 Introduction to Upstream Processing. Students will learn how to work in a cell culture lab properly including essential aseptic skills, media preparation, cell handling and processing, autoclaving, bioreactor assembly and operation, sensor calibration and monitoring, and use of analytical equipment. They will manage to work collaboratively as a team for their cell culture laboratory projects. They will process the data generated in the lab and present their results through PowerPoint slides and a written report. Through these laboratory cell culture studies, students will enhance their understanding of mammalian cell culture in the shake flasks and bioreactors.

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ENG 5140

Bioseparations Engineering and Science

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: Pre-Req: ENG 5100

The course involves application of scientific principles and engineering practices for efficient separation and purification of biomolecules. Fundamentals of various unit operations, such as centrifugation, filtration, membrane separations and chromatography, are discussed. Performance evaluation of unit operations is conducted with the help of mathematical equations. Various case studies for purification of proteins, enzymes, monoclonal antibodies, vaccines and gene therapy related products are discussed. Knowledge of mass balance, basic algebra calculus and principles of mass transfer required.

ENG 5141

Introduction to Bioseparations Engineering LAB

School: Henry E. Riggs School of Applied Life Sciences
Course Credit: 2.0

Terms Offered: Spring Term Module 1

Pre-requisites: Pre-req: ENG 5140 concurrent

The primary goal of this course is to provide students with an advanced background in Bioseparations science and engineering. Another goal is for students to gain substantial first-hand experience in the field, through a series of laboratory exercises.(ALS 422/MEB 315A) Understanding the fundamentals of downstream processing for biochemical product recovery. Students will understand theoretical and operational principles that underlie ion exchange chromatography, affinity chromatography, ultrafiltration, and diafiltration.

ENG 5142

Advanced Bioseparations Engineering Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: Pre-req: ENG 5140

The primary goal of this course is to provide students with an advanced background in Bioseparations science and engineering. Another goal is for students to gain substantial first-hand experience in the field, through a series of laboratory exercises. Understanding the fundamentals of downstream processing for biochemical product recovery. Students will understand theoretical and operational principles that underlie ion exchange chromatography, affinity chromatography, ultrafiltration and diafiltration.

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ENG 5150

Process Operations for Biotechnology Applications

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: MEng Program students only

The purpose of this basic laboratory course is to provide the students with hand on experience in design and construction of the most widely applicable vector designs. There are a large number of variations possible in the design of vectors depending on, for example, the expression system and the uses they are put to. This course focuses on teaching the students the basic approaches and methods used in the laboratory and in a manufacturing. Students will gain knowledge of the use of selectable markers, promoters, vector targeting and linearization and analytical methods such as southern blot analyses.

ENG 5151

Vector & Strain Design Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: MEng Program students only

This introductory course is tailor-made for aspiring bioprocessing engineering students with minimal prior exposure to microbiology. The curriculum delves into the fundamental aspects of molecular cloning and engages students in hands-on laboratory experiments aimed at constructing recombinant genetic structures for microbial expression. Throughout the course, students will be exposed to a range of methods that showcase the progressive development of contemporary cloning techniques while honing their proficiency in standard laboratory protocols and aseptic practices.

ENG 5152

Principles of Bioreaction Engineering

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: MEng program students only

Introduction to (bio) reaction engineering. Definition of terms, classification of (bio)reactions, kinetics of reaction, rate and order of reaction, methods of determination of the order and rate of reaction. Arrhenius

equation. (Bio) Reactor design and performance. Types or reactors. Batch reactors, semi batch and continuous (perfusion) bioreactors. Mixed flow and plug flow. Calculation and comparison of performance and reactor size. Residence time distributions: E, F and C curves and their application. Methods of measurements of RTD. Models of non-ideal flow, dispersion model and dispersion coefficient, closed and open vessels. Tank in series model and laminar flow models. Bioreactor integration into the process. Process considerations, reaction medium (media composition) : product recovery (yield and titre). Process design methodology. Biopharmaceutical industry examples and case studies. Bioreactor control and operation.

ENG 5153

Engineering Fundamentals for Bioprocessing

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The objective of this course is to provide first-year MEng in Bioprocessing students who have not had undergraduate engineering courses in fluid mechanics, heat transfer and mass transfer with these concepts and skills associated with bioprocess engineering. The topics covered include the application of engineering calculations to analyze and design bioreactors and associated systems for bioproduction.

ENG 5160

Introduction to Bioprocessing

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

Introduction to the basic principles and key unit operations involved in bioprocessing and biomanufacturing of products such as therapeutics, enzymes and other products. The course is taught with an integrated introduction, seminar style which will include industry guest lecturers and bioprocessing faculty. Following the 2.5 days of introduction, several Friday morning sessions will be held to review and reinforce concepts presented by the lectures. Then there will be assignments, a poster session and a final exam to demonstrate comprehension.

ENG 5300

Medical Devices

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course presents an overview of medical devices focusing on those associated with areas of high job growth. Each type of device is accompanied with discussion of healthy anatomy and physiology, associated disease states, engineering principles of operation, manufacturing practices that are unique to the device, and areas for growth and improvement. Samples of a few medical products will be shown to the students. Group projects will focus in the discussion of stakeholders including patients, physicians, and current industry players. This course material provides a foundation for development of future medical device strategies.

ENG 5320

Computer Aided Design

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Build proficiency in understanding and constructing computer aided designs for use with prototyping, product development, and design communication. The course will culminate with the Certified SolidWorks Associate Academic exam. Students entering as a Certified SolidWorks Associate (CSWA), will work towards the CSWP exam.

ENG 5330

Prototyping Methods

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Pre-Req: ENG 5320

Gain practical knowledge about commonly used prototyping methods used in medical device design from the conception to product development stages through a combination of instruction and applied mini-projects. Topics are in the categories of (a) identifying goals in prototyping, (b) method selection, (c) material forming methods, (d) material joining methods, and (e) planning for scalable design.

ENG 6100

Team Design Project

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: MEng program students only

In this capstone project, the second year MEng students work in teams to design a complete biomanufacturing process capable of producing commercial quantities of an API and DP including gene cell therapeutic products, vaccines, and stem cell products. Working on separate design projects, each team evaluates the manufacturing options, design the equipment and plant facility to meet a specified annual demand for the product, as well as assess the potential commercial opportunities. Teams are advised by a panel of academic and industry experts. Monthly presentations are scheduled to monitor the progress of each project. Each semester the students are required to submit an executive summary report. At the end of the academic year, the teams present their work in front of KGI faculty and industry participants.

ENG 6132

Advanced Upstream Processing

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: Pre-req: ENG 5132

The primary goal of this course is to provide students with an advanced background in mammalian cell biotechnology. Biology of cultured cells including cell line generation techniques, scale-up and manufacturing capacity, as well as engineering aspects including aeration and stirring for bioreactor designing will be discussed. This course will aim to further the knowledge of different modes of operation of bioreactors and different cell retention techniques. The course will introduce advanced topics including stem cells and CAR-T-cells from the perspective of clinical/manufacturing challenges and process designs.

ENG 6140

Advanced Bioseparations Engineering

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: Pre-req: ENG 5140

Various unit operations relevant to downstream purification of biopharmaceuticals were introduced in ENG 5140. Basic principles, performance equations, numerical problems and case studies related to centrifugation, filtration, chromatography and membrane separations were also discussed. This course aims to further advance the knowledge of downstream purification of biopharmaceuticals by exploring the application aspects. Using the background knowledge acquired in ENG 5140, three major objectives are targeted in this course.

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ENG 6152

Emerging Therapeutics (Stem cells, Gene Therapy, Tissue Engineering)

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: ENG 5100

Next generation biologics include stem cells, gene therapy a, tissue engineering and regenerative medicine. In this course the students will be given basic understanding of the challenges and opportunities in developing a biopharmaceutical grade product based on these emerging discoveries. Students learn stem cell biology and the challenges regarding clinical testing and commercialization of cell therapies and gene therapies. The ability to collect, analyze, and present information regarding new cell therapy and gene therapy products and processes in development. Different bioreactor design and scale up as well as scalable purification methods will be developed through case studies.

ENG 6160

Principles of Bioprocess Engineering Design & Practice

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: MEng program students only

The role of the bioprocess design in the development of a complete plant design. The reiterative nature of design. Equipment design. Types of bioreactor, purification columns, filters, heat exchangers, nano-filters, virus inactivation reactors and their applications in biotechnology. Design and scale up of each equipment. Process equipment costs and sources of data, cost indices: plant capital cost evaluation, typical distribution of plant capital costs and operating costs. Instrumentation: symbols, subdivision of the process streams and use of control systems: typical applications of flow, pressure, level and temperature control. The concept of loss prevention, Sis Sigma analysis and quality by design (QbD) in a biopharmaceutical industry setting: Doing a job safely, attitudes of mind. Management of safety: Factory Acts, Health and Safety at Work Act: production, storage and transport. Project review procedure: risk assessment, research and development, design, construction and operation. Identification of hazards. Inherently safe design. Hazan and hazard analysis. Scope of computer-aided process engineering and computer-aided design in process engineering applications. Process flow-sheeting, topology analysis, sequential and simultaneous solution methods. Process flow-sheet simulation.

ENG 6310

Drug Delivery Devices

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

This course will provide the students with the underlying concepts, structure and performance in classical and developing drug delivery systems for bioactive compounds. Topics covered include the rationale behind the need for drug delivery systems, engineering of controlled drug delivery systems, implantable drug delivery systems, various configurations to overcome absorption barriers, biocompatibility, biomaterials for use in drug delivery systems, in vitro models and tissue engineering for preclinical testing and critical review of several clinically relevant drug delivery systems. The students will gain an understanding of how drug delivery systems are developed and will build a foundation to categorize and evaluate drug delivery systems for specific indication.

ENG 6340

Device and Diagnostics Product Development

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This course covers technical and managerial aspects involved in the development of medical devices and diagnostics through a combination of lectures, classroom labs, and a team design project. Students will solve specific tasks from the perspective of a product manager, development engineer, industrial designer, or manufacturing engineer. Related aspects of market research, quality control, and the FDA approval process are emphasized in other complementary courses at KGI. The design project leads students through: (a) preparation of a problem statement and product design specification; (b) design and prototyping; (c) testing; (d) design for manufacture and assembly; and will conclude with (e) the preparation of a device master record. Specific technical skills necessary for the team project are each introduced using a combination of a concept video, brief lecture, and classroom lab. Students will receive an overview of general industry standards, quality systems, and certification processes.

ENG 6350

Medical Device Production

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

The purpose of the course is for students to gain practical knowledge about common manufacturing processes and how they are used to produce medical devices. Topics span five primary course learning objectives: i. Specific manufacturing methods relevant to medical devices, including: machining processes, injection molding, metal forming, laser micromachining and microscale applications. ii. Lean engineering and efficient work cell designs. iii. Part specifications, allowances and tolerances, geometric dimensioning and tolerancing (GD&T), measurement systems analysis. iv. Applying various

manufacturing methods and lean layout principles to medical devices through the use of industry examples including spinal spacer cages, stents, microfluidic devices, and plastic connectors, dispensers, fittings, etc. v. Statistical quality control principles and applications in medical device industry, including control charting and acceptance sampling.

GENE 5000

Genetic Counseling I

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Genetic Counseling I and II represent sequential courses which explore principle issues in genetic counseling. Genetic Counseling I will provide an overview of the history and evolution of genetic counseling and how it relates to clinical genetics services with the health care delivery system. This course will explore approaches to understanding and applying communication skills specific to applications in genomic medicine. This will include genetic counseling skills such as interviewing techniques, case preparation, family history collection and assessment, decision making facilitation and health literacy. Students will be oriented to the complexities involved with case presentations, medical terminology, and application of knowledge into practice through individual and team-centered case-based learning. Thinking critically through a lens of cultural engagement and self-reflection will be emphasized.

GENE 5020

Human Embryology and Prenatal Diagnosis

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSGC Y1 or GENE 5270

The course will focus on developmental mechanisms clinically oriented to human genetic disease and birth defects. We will explore the process of human development from gametogenesis, fertilization, gastrulation, to birth. The course will take a systematic approach to human embryonic and fetal development with early focus on the stages of embryological development, signaling pathways, and the establishment of germ layers and eventually weaving in complex body systems and their intricate relationships with one another. The discussion of major body systems will begin with their organogenesis and anatomy throughout normal development, followed by case studies analyzing potential developmental anomalies, effects of teratogens, and practice in differential diagnosis. Online lectures including information relevant to required textbook readings as well as video animations will enable the student to be exposed to a deep understanding of human embryological development as it relates to clinical findings and research. Class time will incorporate a review of online lectures, clinical case studies, group work, and literature review to enhance and strengthen understanding of developmental concepts.

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GENE 5030

Research Methodology I

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

Part one of a two part series providing an overview of research methodologies for genetic counseling research. Together parts I and II will walk students through commonly employed quantitative and qualitative research strategies in genetic counseling research, following the systematic steps necessary to identify a viable research topic, develop testable hypotheses and research questions, collect and analyze data to answer those questions, and produce a research manuscript of publishable quality. Part one of the two part series focuses on the introduction/ literature review stage of manuscript preparation and will help students to identify a viable topic of interest for their culminating assignment.

GENE 5040

Principles of Public Health

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

This course provides an overview of public health, population based interventions, and societal and public policy issues related to public health genetics. Public health genetics activities and perspectives at the local and state levels, as well as academia and industry are illustrated using existing programs and projects as examples. This course takes a "hands-on" approach, using problem-based and student-directed learning through lectures, small group discussions, and in class activities to highlight the role of theory and practice in public health within the context of genetics medicine.

GENE 5050

Genetic Counseling II

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 5000

Genetic Counseling, I and II represent sequential courses which explore principal issues in genetic counseling. Genetic Counseling, I will provide an overview of the history and evolution of genetic counseling and how it relates to clinical genetics services with the health care delivery system. This

course will explore approaches to understanding and applying communication skills specific to applications in genomic medicine. This will include genetic counseling skills such as interviewing techniques, case preparation, family history collection and assessment, decision making facilitation and health literacy. Students will be oriented to the complexities involved with case presentations, medical terminology, and application of knowledge into practice through individual and team-centered case-based learning. Thinking critically through a lens of cultural engagement and self-reflection will be emphasized.

GENE 5055

Ethics of Genomic Medicine

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

As practitioners and leaders in genomic medicine, KGI graduates will be at the forefront in the use and application of diagnostics and information related to genomic medicine. As a result, they will be confronted with ethical issues related to the research, development, marketing, use, application, and sharing of genomic research and information. Therefore, this course explores the ethical challenges around genomics, the use of genomic information, and genomic medicine. This class will focus on the practical application of ethical principles and theories to genomic medicine and genetic counseling through real world case studies and examples.

GENE 5060

Research Methodology II

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 5030

Part two of a two-part series providing an overview of research methodologies for genetics counseling research. Together parts I and II will walk students through commonly employed quantitative and qualitative research strategies in genetics counseling research, following the systematic steps necessary to identify a viable research topic, develop testable hypotheses and research questions, collect and analyze data to answer those questions, and produce a research manuscript of publishable quality. Part two of the series focuses on the development of the Methods, Results, and Discussion sections of a peer-reviewed, primary research journal article.

GENE 5090

MSGC Case Conference/Journal Club

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This is a student-facilitated course involving student-led presentations. The intent is to raise the academic interest and scholastic skills of students through critical review of the literature and presentations. The series encourages life-long learning, critical analysis of the literature, and the development of presentation skills. The format includes case presentations on timely topics in this rapidly involving field. This course will continue for two years, giving first and second year students the opportunity to increase interaction, learn from each other, hear more varied perspectives, and build professional and collegial bonds. The course is not graded but students will be evaluated on their active participation and attendance.

GENE 5091

MSGC Case Conference/Journal Club

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This is a student-facilitated course involving student-led presentations. The intent is to raise the academic interest and scholastic skills of students through critical review of the literature and presentations. The series encourages life-long learning, critical analysis of the literature, and the development of presentation skills. The format includes case presentations on timely topics in this rapidly involving field. This course will continue for two years, giving first and second year students the opportunity to increase interaction, learn from each other, hear more varied perspectives, and build professional and collegial bonds. The course is not graded but students will be evaluated on their active participation and attendance.

GENE 5120

Bioinformatics in Python

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Pre-req: MATH 5100 or permission of Instructor

This course provides an introduction to bioinformatics, emphasizing sequence analysis. By the end of the course, students will comprehend the role of bioinformatics in addressing both hypothesis-driven and hypothesis-generating questions within the life sciences. Covered topics include various algorithms for sequence alignment and deriving biological insights from them. Additionally, the course goes beyond mere sequence comparisons to explore certain aspects of proteomics. A substantial coding component is incorporated into the curriculum, allowing students to experience the process of building a software tool

from scratch, given that it is a project-oriented class.

GENE 5130

Bioinformatics in R

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: Pre-req: MATH 5220 or permission of Instructor

Bioinformatics integrates core principles from biology, computer sciences, and statistics to extract meaningful information from large-scale genomic data. This course explores the fundamental principles of bioinformatics using the R software environment. Although the course focuses on transcriptomic data analysis, the principles covered can be applied to many other types of large-scale data encountered in the life science industries. Students will gain hands-on experience retrieving information from biological databases, data cleaning for bioinformatic workflows, executing bioinformatic packages, and visualizing genomic data.

GENE 5150

Human Genomics NGS Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: Co-req: GENE 5250

This course is a companion to the Human Genomics lecture and literature-based course GENE 5250. In this lab, students will prepare genomic DNA extractions from human cells and quantify the amount and quality of nucleic acid preparations. Students will identify variants within DNA sequencing reads. Students will carry out an RNA-seq experiment and perform the downstream data analysis pipeline to identify differentially expressed genes. Lastly, students will conduct a human genome sequencing project, including sequence alignment and variant calling. In addition to laboratory skills, students will gain experience in sample documentation, pipeline documentation, and scientific report writing.

GENE 5190

MSGDA Journal Club

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: All Terms

Pre-requisites: MSGDA Program

This journal club is a one-hour, weekly course with student-led presentations on timely topics in this rapidly evolving field. The intent is to raise the academic interest and scholastic skills of students through critical review of the literature and presentations. The series encourages life-long learning, critical analysis of the literature, and serves as preparation for capstone projects and development of presentation skills. This course will continue for two years, giving first and second-year students the opportunity to increase interaction, learn from each other, hear varied perspectives, and build professional and collegial bonds. The colloquium is not graded but students will be evaluated on their active participation and attendance. We will also be discussing professional development and the clinical genomics industry landscape.

GENE 5191

MSGDA Journal Club

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This journal club is a one-hour, weekly course with student-led presentations on timely topics in this rapidly evolving field. The intent is to raise the academic interest and scholastic skills of students through critical review of the literature and presentations. The series encourages life-long learning, critical analysis of the literature, and serves as preparation for capstone projects and development of presentation skills. This course will continue for two years, giving first and second-year students the opportunity to increase interaction, learn from each other, hear varied perspectives, and build professional and collegial bonds. The colloquium is not graded but students will be evaluated on their active participation and attendance. We will also be discussing professional development and the clinical genomics industry landscape.

GENE 5200

Human Molecular Genetics

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms
Pre-requisites: N/A

Human Molecular Genetics will explore the structure and function of human genes and the connection of genotype to phenotype. The scope of this course will include DNA structure, chromosome structure, DNA replication and repair, the cell cycle, meiosis, mitosis, and gene expression and regulation. Mendelian and non-Mendelian inheritance will be discussed on the scale of individuals and populations. We will examine the role of mutation and variation in the etiology and diagnosis of disease, especially identifying and mapping causal genes. This course will also feature molecular biology techniques used to replicate DNA sequence, modify DNA molecules and genotype individuals.

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GENE 5240

Genetic Disease Mechanisms

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

Genetics plays a fundamental role in the pathogenesis of most human disorders. This course is designed to provide an overview of genetic mechanisms that lead to human disorders, including their etiology, molecular basis, and mode of inheritance. For each mechanism, representative disorders will be presented including key symptoms and genetic testing.

GENE 5250

Human Genomics

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 5200

Human Genomics will explore the structure and function of the human genome. This course will begin by examining the sequence of the human genome and the dynamic structure of chromatin in human cells. It will also focus on technologies used to determine the DNA sequence and functional state of chromatin regions in living cells, including next generation sequencing, GWAS, and ChIP-seq. Furthermore, students will explore genome-wide data sets in order to predict phenotypes in populations and individuals. Variation in the population will be explored for the purposes of mapping complex traits, variant curation and genetic anthropology.

GENE 5260

Clinical Cancer Genomics

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 5200

Genetic cancer risk assessment is an interdisciplinary standard-of-care practice that uses a growing arsenal of genetic and genomic tools and empiric risk models to provide precision prevention and management for individuals and their families. Identifying hereditary cancer predisposition through genomic cancer risk assessment allows for intensified measures to prevent cancers or detect them at an earlier, more treatable stage, and both germ line and somatic/tumor testing may guide precision cancer

therapies. This course provides a foundation of knowledge and skills in the multidisciplinary specialty practice of genetic cancer risk assessment and counseling. The course designed is a blended, flipped-classroom model that combines recorded core distance-learning didactic modules developed by recognized experts in the field of cancer genomics with topic-specific discussion board engagement between learners and faculty, and weekly face-to-face application of new knowledge into practice through individual and team-centered case-based learning and cancer risk counseling skills development.

GENE 5270

Medical Genetics

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 5200

This course is intended to provide the trainee with a comprehensive curriculum on major topics in medical genetics. Various applications of genetics to human health, including studies of the inheritance of diseases in families, mapping of disease genes to specific locations on chromosomes, analyses of the molecular mechanisms through which genes cause disease, diagnosis and treatment of genetic disease, and genetic counseling, in which information regarding risks, prognoses, is communicated to patients and their families. This course will also cover the social implications of genetic disease and diagnosis. These principles will be illustrated using examples from clinical practice. Emphasis in lectures will be placed on molecular medicine with discussion of the most up-to-date clinical diagnostics and therapeutics.

GENE 5280

Biochemical Genetics

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 5200

Metabolic disorders and biochemical disorders are an area of clinical genetics that is increasing in importance and complexity. This course provides an overview of the major groups of metabolic disorders, specific metabolic disorders, their metabolic pathways, the genes involved, and treatment. This course utilizes lectures and case-based examples and learning assignments. There will be an emphasis on how a diagnostic process unfolds, understanding the entire picture, what characteristics lead the clinician to certain tests and studies, what does the results mean, where do you go next. This course will focus on modes of inheritance, recurrence risks, pathogenesis, screening options, diagnostic testing, natural history, treatment options, psychosocial and genetic counseling implications.

GENE 5290

Pharmacogenomics

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: N/A

This course will give students a broad perspective on the field of pharmacogenomics and provide them with insight into the growing importance it will play in clinical therapeutics and future drug design. The first part of the course will examine some of the common methodologies used in the application of pharmacogenomics along with role pharmacogenomics can play in altering drug pharmacokinetics and pharmacodynamics. The second part of the course will focus on the role of pharmacogenomics in the pharmacotherapy of area such as cardiovascular, hematologic, CNS, Cancer, and the immune system. Part three of the course will address the ethical, legal and social issues involved the application of pharmacogenomics to clinical practice.

GENE 5800

Genetic Counseling Fieldwork Observation

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Students enrolled in the Human Genetics and Genetic Counseling program will be required to attend a variety of clinical, laboratory and industry observations, workshops and standardized patient encounters in their 1st year, prior to beginning clinical rotations in their 2nd year. Some of these settings may not have genetics professionals staffing them but they are excellent learning opportunities. The goal of these observations is to help students gain experience and familiarize themselves with the many different aspects of the genetic counseling field. The observations will also help them to get comfortable in many different settings and build expectations and professionalism for their fieldwork placements.

GENE 5801

Genetic Counseling Fieldwork Observation

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Students enrolled in the Human Genetics and Genetic Counseling program will be required to attend a variety of clinical, laboratory and industry observations, workshops and standardized patient encounters in their 1st year, prior to beginning clinical rotations in their 2nd year. Some of these settings may not have genetics professionals staffing them but they are excellent learning opportunities. The goal of these observations is to help students gain experience and familiarize themselves with the many different

aspects of the genetic counseling field. The observations will also help them to get comfortable in many different settings and build expectations and professionalism for their fieldwork placements.

GENE 6000

Psychosocial Development I

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: All Terms

Pre-requisites: N/A

Psychosocial Development I and II represent a sequential course that provides the necessary tools for genetic counselors to excel in their careers and provide students with a foundation in genetic counseling psychosocial skill development. Students are taught psychosocial assessment of clients' concerns about genetic conditions and risks. They will develop tools for establishing and acting on a therapeutic relationship. This activity and discussion-based course is designed to provide genetic counseling students to learn psychosocial concepts and apply them to their clinical internships. The goal of this course is to give the exposure and tools needed to successfully counsel patients in a variety of settings, focusing on psychosocial assessment and responses and implementing interventions. Case examples with role-playing are essential in addition to self-assessment and reflection activities.

GENE 6010

Professional Development I

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The Professional Development course series is designed for second-year genetic counseling students to prepare for their entry into the genetic counseling workforce, aiming to introduce a variety of topics to support growth, development, and success in the field.

GENE 6050

Psychosocial Development II

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 6000

Psychosocial Development I and II represent a sequential course that provides the necessary tools for genetic counselors to excel in their careers and provide students with a foundation in genetic counseling psychosocial skill development. Students are taught psychosocial assessment of clients concerns about genetic conditions and risks. They will develop tools for establishing and acting on a therapeutic relationship. This activity and discussion based course is designed to provide genetic counseling students to learn psychosocial concepts and apply them to their clinical internships. The goal of this course is to give the exposure and tools needed to successfully counsel patients in a variety of settings, focusing on psychosocial assessment and responses and implementing interventions. Case examples with role-playing are essential in addition to self-assessment and reflection activities.

GENE 6060

Professional Development II

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 6010

Professional Development I and II represent a sequential course that will introduce students to a variety of topics to enable genetic counselors to excel in their careers and provide students with a foundation in genetic counseling professional development. Students will explore career options, and genetics-related professional societies, practice writing CVs and cover letters, learn job interview techniques and negotiation skills, prepare to obtain ABGC certification and state licensure, gain professional self-awareness, and understand the importance of self-reflection and balancing professional and personal demands. Students will also obtain tools for the future, including exploration of position statements and public policy issues, funding and publishing research work, preparing for public speaking and presentations, and understanding the broader healthcare system (billing, coding, career ladders and reviews) as well as clinical program development and management.

GENE 6090

MSGC Case Conference/Journal Club

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This is a student-facilitated course involving student-led presentations. The intent is to raise the academic interest and scholastic skills of students through critical review of the literature and presentations. The series encourages life-long learning, critical analysis of the literature, and the development of presentation skills. The format includes case presentations on timely topics in this rapidly involving field. This course will continue for two years, giving first and second year students the opportunity to increase interaction, learn from each other, hear more varied perspectives, and build professional and collegial bonds. The course is not graded but students will be evaluated on their active participation and attendance.

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GENE 6091

MSGC Case Conference/Journal Club

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This journal club is a one-hour, weekly course with student-led presentations on timely topics in this rapidly evolving field. The intent is to raise the academic interest and scholastic skills of students through critical review of the literature and presentations. The series encourages life-long learning, critical analysis of the literature, and serves as preparation for capstone projects and development of presentation skills. This course will continue for two years, giving first and second-year students the opportunity to increase interaction, learn from each other, hear varied perspectives, and build professional and collegial bonds. The colloquium is not graded but students will be evaluated on their active participation and attendance.

GENE 6094

ABGC Board Review

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This course is designed to support preparation for the genetic counseling board examination. This course is not graded but students will be evaluated on their active participation and attendance. This course is aimed to help students prepare for the American Board of Genetic Counseling (ABGC) examination. This course is not graded but students will be evaluated on their active participation and attendance. Lectures, activities and discussions will be tailored toward genetic counseling board examination review.

GENE 6095

ABGC Board Review

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course is aimed to help students prepare for the American Board of Genetic Counseling (ABGC) examination. This course is not graded but students will be evaluated on their active participation and

attendance. Lectures, activities and discussions will be tailored toward genetic counseling board examination review.

GENE 6130

DNA Seq and Variant Analysis

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: GENE 5200

This course provides a detailed understanding of DNA sequencing technologies and genome sequence interpretation. Students will learn about the variety of sequencing techniques and platforms, including generated data types and file formats. Emphasis will be placed on the relative strengths of genotyping arrays, targeting sequencing, whole genome sequencing, and whole exome sequencing strategies in study design and clinical practice. The second half of the course will focus on individual and family-based sequencing projects, including the identification of single nucleotide polymorphisms, indels, copy number variants, and chromosome rearrangements and the determination of variant significance. Other topics may include personal identity testing, molecular anthropology, and somatic single cell sequencing.

GENE 6135

Genomic Knowledge Translation

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: N/A

This course will focus on the translation of genomic data into actionable clinical information. Students will use role-playing and written reports to gain experience conveying genomic analysis results to genetic counselors and clinicians. Special attention will be paid to crafting variant significance reports using HGVS nomenclature. Case studies and team-based learning activities will be used to follow patients from sample collection, test selection, data acquisition, results determination, to suggested clinical action. Best practices for genomic variant curation and patient documentation will be emphasized.

GENE 6140

Functional Genomics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: GENE 5250 or permission of instructor

This course will provide in-depth and hands-on training in using genome-wide data to answer functional questions in human biology. Topics will include GWAS, transcriptomics, ChIP-seq, and chromatin conformation capture techniques. The course will also include a discussion of discoveries made through major genomics initiatives such as the ENCODE project, TCGA, and the Epigenetics Roadmap.

GENE 6145

Genomic Data Visualization and Management

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 5120

This course is designed to train students in best practices in genomic data management and documentation, including data storage requirements, file formats, and HIPAA considerations. Students will learn theories and practices of data visualization, experiencing making figures and graphics (i.e., Circos plots, Manhattan plots, genome browser tracks, haplotype networks, heat maps, etc.) to represent the results of various genomic analyses through various visualization technologies. Students will also practice making analysis pipelines and protocol figures or infographics for publication and educational materials. Additionally, students will learn and refresh their knowledge of how to use Python as a programming language to automate routine data management tasks in genomics research. The main topics of this course include basic concepts of information visualization, best practices for data extraction, transformation and loading process, fundamentals of data preparation and understanding, and an overview of the data analysis pipeline.

GENE 6190

MSGDA Journal Club

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This journal club is a one-hour, weekly course with student-led presentations on timely topics in this rapidly evolving field. The intent is to raise the academic interest and scholastic skills of students through critical review of the literature and presentations. The series encourages life-long learning, critical analysis of the literature, and serves as preparation for capstone projects and development of presentation skills. This course will continue for two years, giving first and second-year students the opportunity to increase interaction, learn from each other, hear varied perspectives, and build professional and collegial bonds. The colloquium is not graded but students will be evaluated on their active participation and attendance. We will also be discussing professional development and the clinical genomics industry landscape.

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GENE 6191

MSGDA Journal Club

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This journal club is a one-hour, weekly course with student-led presentations on timely topics in this rapidly evolving field. The intent is to raise the academic interest and scholastic skills of students through critical review of the literature and presentations. The series encourages life-long learning, critical analysis of the literature, and serves as preparation for capstone projects and development of presentation skills. This course will continue for two years, giving first and second-year students the opportunity to increase interaction, learn from each other, hear varied perspectives, and build professional and collegial bonds. The colloquium is not graded but students will be evaluated on their active participation and attendance.

GENE 6446

Genetic Engineering

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

This course is designed as an in-depth exploration of the genetic engineering field. The course will cover the history of genetic engineering, the evolution of different genetic engineering technologies (i.e., Zinc Fingers, TALENs and CRISPR), the current use of genetic engineering, and human clinical trials. Emphasis will be placed on how genetic engineering tools are designed and used to model, diagnose and treat human disease. Other potential topics include how genetic engineering impacts drug discovery, agriculture, and lifestyle.

GENE 6447

Microbiomics and Pathogen Genomics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: N/A

This course focuses on the use of next generation sequencing to identify microorganisms, pathogens, and antimicrobial resistance based on genotype. The Human Microbiome Project will serve as a roadmap

for understanding the purpose of metagenomics and microbiome analysis in healthcare. We will further discuss the role of sequencing in infectious disease diagnostis and in responding to disease outbreaks such as COVID-19. During the course you will be able to take a deep dive into a relevant topic of interest to you, and learn how to use various bioinformatic tools for data analysis and visualization.

GENE 6500

Independent Study

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This course is designed to provide the student with an opportunity to remediate and further apply knowledge, practice-based competencies and clinical skills obtained in previous fieldwork placements.

GENE 6501

Independent Study

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course is designed to provide the student with an opportunity to remediate and further apply knowledge, practice-based competencies and clinical skills obtained in previous experiential placements.

GENE 6502

Independent Study

School: School of Health Sciences

Course Credit: 0.0

Terms Offered: Summer Terms

Pre-requisites: N/A

This course is designed to provide the student with an opportunity to remediate and further apply knowledge, practice-based competencies and clinical skills obtained in previous experiential placements.

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GENE 6801

Genetic Counseling Fieldwork I

School: School of Health Sciences

Course Credit: 8.0

Terms Offered: Summer Terms

Pre-requisites: N/A

Becoming an effective genetic counselor comes through a variety of different clinical and personal experiences. Clinical fieldwork provides students with an on-going developmental process that allows them to refine their counseling skills over time and throughout many different settings. Students are required to satisfactorily complete a total of five rotations which will be in a variety of genetics specialties (prenatal, pediatric, adult disease, cancer, industry/lab, specialty clinic, public health, etc.). Fieldwork enables students to gain practical experience in the genetic counseling field and develop their own personal counseling skills while under the guidance and tutelage of industry professionals who have years of experience in practice. They will also be better able to understand the various roles that genetic counselors play in the healthcare and other industries. Students will be directly involved in the provision of patient care and on the lab side they will be involved with interpretation and reporting of complex genetic testing results.

GENE 6802

Genetic Counseling Fieldwork II

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Becoming an effective genetic counselor comes through a variety of different clinical and personal experiences. Clinical fieldwork provides students with an on-going developmental process that allows them to refine their counseling skills over time and throughout many different settings. Students are required to satisfactorily complete a total of five rotations which will be in a variety of genetics specialties (prenatal, pediatric, adult disease, cancer, industry/lab, specialty clinic, public health, etc.). Fieldwork enables students to gain practical experience in the genetic counseling field and develop their own personal counseling skills while under the guidance and tutelage of industry professionals who have years of experience in practice. They will also be better able to understand the various roles that genetic counselors play in the healthcare and other industries. Students will be directly involved in the provision of patient care and on the lab side they will be involved with interpretation and reporting of complex genetic testing results.

GENE 6803

Genetic Counseling Fieldwork III

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Becoming an effective genetic counselor comes through a variety of different clinical and personal experiences. Clinical fieldwork provides students with an on-going developmental process that allows them to refine their counseling skills over time and throughout many different settings. Students are required to satisfactorily complete a total of five rotations which will be in a variety of genetics specialties (prenatal, pediatric, adult disease, cancer, industry/lab, specialty clinic, public health, etc.). Fieldwork enables students to gain practical experience in the genetic counseling field and develop their own personal counseling skills while under the guidance and tutelage of industry professionals who have years of experience in practice. They will also be better able to understand the various roles that genetic counselors play in the healthcare and other industries. Students will be directly involved in the provision of patient care and on the lab side they will be involved with interpretation and reporting of complex genetic testing results.

GENE 6804

Genetic Counseling Fieldwork IV

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Becoming an effective genetic counselor comes through a variety of different clinical and personal experiences. Clinical fieldwork provides students with an on-going developmental process that allows them to refine their counseling skills over time and throughout many different settings. Students are required to satisfactorily complete a total of five rotations which will be in a variety of genetics specialties (prenatal, pediatric, adult disease, cancer, industry/lab, specialty clinic, public health, etc.). Fieldwork enables students to gain practical experience in the genetic counseling field and develop their own personal counseling skills while under the guidance and tutelage of industry professionals who have years of experience in practice. They will also be better able to understand the various roles that genetic counselors play in the healthcare and other industries. Students will be directly involved in the provision of patient care and on the lab side they will be involved with interpretation and reporting of complex genetic testing results.

GENE 6805

Genetic Counseling Fieldwork V

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Becoming an effective genetic counselor comes through a variety of different clinical and personal experiences. Clinical fieldwork provides students with an on-going developmental process that allows them to refine their counseling skills over time and throughout many different settings. Students are required to satisfactorily complete a total of five rotations which will be in a variety of genetics specialties (prenatal, pediatric, adult disease, cancer, industry/lab, specialty clinic, public health, etc.). Fieldwork enables students to gain practical experience in the genetic counseling field and develop their own personal counseling skills while under the guidance and tutelage of industry professionals who have years of experience in practice. They will also be better able to understand the various roles that genetic counselors play in the healthcare and other industries. Students will be directly involved in the provision of patient care and on the lab side they will be involved with interpretation and reporting of complex genetic testing results.

GENE 6900

MSGDA Capstone I

School: School of Health Sciences

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: N/A

This sequential course is designed to help students successfully complete the capstone requirement for the MSGDA program. In this course, students will gain an understanding of how to conduct genomics research through designing a research project, conducting the research, analyzing collected data, and presenting a written summary and poster presentation to document the study findings. Capstone projects are designed and completed under the guidance of a capstone advisor and capstone committee.

GENE 6901

MSGDA Capstone II

School: School of Health Sciences

Course Credit: 6.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: GENE 6900

This sequential course is designed to help students successfully complete the capstone requirement for the MSGDA program. In this course, students will gain an understanding of how to conduct genomics research through designing a research project, conducting the research, analyzing collected data, and presenting a written summary and poster presentation to document the study findings. Capstone projects are designed and completed under the guidance of a capstone advisor and capstone committee.

GENE 6950

MSGC Capstone I

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: GENE 5060

This sequential course is designed to help students successfully complete the research project requirement for the human genetics and genetic counseling program. In this course, students will gain an understanding of how to conduct clinical research through designing a research study, submitting a research protocol to the Institutional Review Board (IRB), conducting the research, analyzing collected data, and writing a research paper on the study findings. Capstone projects are designed and completed under the guidance of a capstone advisor and larger capstone committee.

GENE 6951

MSGC Capstone Project II

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: Gene 6950

This sequential course is designed to help students successfully complete the research project requirement for the human genetics and genetic counseling program. In this course, students will gain an understanding of how to conduct clinical research through designing a research study, submitting a research protocol to the Institutional Review Board (IRB), conducting the research, analyzing collected data, and writing a research paper on the study findings. Capstone projects are designed and completed under the guidance of a capstone advisor and larger capstone committee.

MATH 5010

Mathematics for Scientists

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: MEng Program students only

This introductory/ intermediate level course gives the students mathematical skills required to understand the basic physical principles of operations involving biological materials.

MATH 5020

Clinical Biostatistics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: All Terms

Pre-requisites: N/A

This course provides a basic primer in statistical methods commonly used in the design of clinical trials. Topics covered include data reporting and descriptive statistics, probability, estimation, hypothesis testing (parametric, non-parametric, and categorical), multisample inference, regression and correlation. Sample size and power estimation methods will be developed for various hypothesis testing scenarios.

MATH 5100

Data Analytics in Python

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

Using the Python programming language, students will gain practical skills in processing and analyzing applied bioscience data, for the purpose of extracting meaningful information from publicly available and other datasets. A series of practical exercises will cover (a) processing data using mathematical tools to isolate relevant information, (b) analyzing processed data to generate insights using algorithms, (c) comparing data sets to determine statistical significance, and (d) creating visualizations to communicate results of processing and analysis.

MATH 5120

Machine Learning in the Life Sciences

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: Pre-req: MATH 5100

Data science is an exciting field of inter-disciplinary science, with a wide range of applications in marketing, finance, life sciences, healthcare as well as technology. This course is designed to provide a practical understanding of key concepts in data analytics and hands-on experience with real data from various sources. Topics covered include methods of data gathering, data processing, data exploration, visualization, classification, and network analysis. Students will gain a deeper understanding by working with data using open source software tools, such as R, R Studio, and Cytoscape. Application areas will emphasize life sciences and biotechnology.

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MATH 5200

Bioinformatics in R

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1
Pre-requisites: N/A

In the last few decades we have witnessed the rapid development of extremely efficient genome sequencing and other high-throughput molecular biology research techniques. With these techniques came the need to store, make available, and analyze huge amounts of biological data. Biomedical data science brings together biology, computer sciences, and statistics to efficiently store and mine these datasets. The proliferation of databases, access of data, and new analysis methodologies necessitates that those involved in life sciences be proficient in the utility of databases and the manipulation and analysis of large data sets. This course introduces students to the principles of biomedical data repositories, bioinformatics, computer scripting in R, statistics and data visualization using publicly available large-scale multidimensional datasets relevant to the life sciences industry.

MATH 5220

Data Analytics in R

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: N/A

Students learn how to use the R programming language and RStudio environment to gain meaningful insights from bioscience data sets such as genetic expression data and bioprocessing experimental data. Techniques covered include sourcing and loading datasets, sorting and filtering data, performing statistical summaries, applying third-party mathematical functions, creating loops and workflows, and creating graphs to visualize results. Students will learn and apply these techniques using a combination of in-class activities, applied homework, and a summative final team project.

MATH 5300

Machine Learning in the Life Sciences

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: N/A

Machine Learning sits at the intersection of statistics, probability, computer science, and information theory. Its primary goal is to develop systems that can learn from experience to solve problems across

various domains. However, this class focuses on applications in life sciences and some intersections with healthcare and business. This course is designed to introduce students to fundamental concepts in machine learning, enabling them to understand and assess literature effectively. Topics covered include regression, classification, clustering, dimensionality reduction, model evaluation and selection, and feature engineering. This class also offers hands-on experience with real-world data from diverse sources that students use to work on projects. Since this is an introductory class, it is self-contained, but basic knowledge of Python, statistics and probability, and linear algebra would be helpful.

MATH 6510

Market Analytics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: Pre-req: BUS 6500 but can be taken concurrently

In the dynamic world of life sciences, where innovation thrives on data-driven insights, marketing analytics plays a pivotal role. This course equips you with the skills and knowledge to leverage powerful analytics tools and translate complex data into actionable marketing strategies. You'll master quantitative techniques to analyze market trends, understand customer behavior, and optimize marketing campaigns. This course equips students with the tools and methodologies essential for success in roles such as market research analysts, product managers, and business development professionals within life sciences organizations.

MSCM 5001

Infectious Diseases and Community Health

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: MSCM Program or PD permission.

The course is aimed to provide a broad overview of infectious pathogens and human diseases they cause. This course will enable students to gain a fundamental understanding of microbial pathogenesis, such as general classification and families of pathogens, and specific mechanisms by which selected pathogens cause diseases. The course will also introduce the students to the individual and community factors that affect susceptibility to infectious agents as well as provide them with tools to assess the efficacy of different treatments and prevention interventions.

MSCM 5002

Chronic Diseases and Community Health

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course is designed to provide a survey of the major chronic diseases and related prevalence, risk, and the impact on community health through the application of epidemiological concepts.

MSCM 5103

Health Systems Sciences

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: MSCM Program or PD permission.

In the Health Systems Sciences I course, students will identify and define process improvement opportunities for health care delivery. Students will use active learning (such as case studies, focused discussion, problem-solving, and role-playing class exercises) to analyze how health professionals deliver health care solutions and identify opportunities for improvement. They will then select and analyze improvement opportunities using various tools with an unrelenting focus on selecting healthcare process opportunities that have the potential to improve the patient experience of care, reduce per capita cost of health care, and finally strengthen community health. Students are expected to formulate at least two identified opportunities and convert those into project ideas, present their analysis on project selection and communicate a plan for building consensus for effective organizational change.

MSCM 5104

Advanced Health Systems Sciences

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSCM 5103

Health Systems Sciences II equips students with the specific skills and knowledge necessary to successfully implement a process improvement project in a health care setting. The course covers elements of the Lean design approach as well as the Waterfall and Agile project management methods. In addition, integral to the success of this project will be the understanding and utilization of negotiation techniques to handle cross-cultural and intergenerational audiences, and the potential of virtual settings. On completion of this course, students will be able to explain the challenges to improving health care delivery and outcomes and will be able to propose feasible ways to address those challenges.

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MSCM 5105

Health Systems Sciences

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Health Systems Sciences equips students with the specific skills and knowledge necessary to successfully implement a process improvement project in a healthcare setting. The course covers elements of the Lean design approach and the Waterfall and Agile project management methods. In addition, integral to the success of this project will be the understanding and utilization of negotiation techniques to handle cross-cultural and intergenerational audiences, as well as the potential of virtual settings. On completion of this course, students will be able to explain the challenges to improving health care delivery and outcomes and will be able to propose feasible ways to address those challenges.

MSCM 5201

Life Sciences (Biological Sciences)

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: MSCM Program or PD permission.

This course is designed to provide an overview of medical science principles with a focus on cell structure and function, genetics, DNA Structure, processes of cellular replication, human anatomy and physiology.

MSCM 5202

Life Sciences (Chemistry and Behavioral Sciences)

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSCM 5201

This is the second course in the introduction to lmedical sciences series. The present course is designed to provide an overview of key chemistry and behavioral science principles. In the first half of the course, students focus on chemistry, covering electrochemistry, atomic chemical behavior, intermolecular interactions, thermodynamics, and kinetics. In the second half of the course, students review behavioral science principles, including those that underlie sensory processing, perception, cognition, cognitive development, learning, emotions, stress, and self-perception.

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MSCM 5203

Anatomy and Physiology

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: MSCM Program or PD permission.

Anatomy and physiology are core medical sciences that contribute to a foundation for understanding community medicine's clinical and investigative aspects. The course will focus on the biochemistry principles relevant to human function, anatomy & physiology. Students will develop knowledge through lectures, corresponding readings, and weekly individual or group assignments. Comprehensive study guides and section exams also will guide the learning experience.

MSCM 5204

Pathology and Pharmacology

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSCM 5203

Pathology & Pharmacology course outlines the basic principles of the causes and effects of disease and the pharmacological agents (artificial, natural, or endogenous) exerting biochemical or physiological effects on human cells, tissues, and organ systems. Both pathology and pharmacology are core medical sciences and contribute to a foundation for understanding the clinical and investigative aspects of community medicine. Students will develop knowledge through concise lectures, corresponding readings, and weekly individual or group assignments. Comprehensive study guides and section exams also will guide the learning experience. In addition, an introduction to community mental health is offered as a special block within this course. Concepts learned from MSCM 5203 and this course are integrated into this overview of the clinical practice of community mental health care. Students will learn about recent issues and clinical research in the field and gain an understanding of the etiologies, pathogenesis, and therapeutic interventions for core mental conditions managed at the community level.

MSCM 5302

Community Health Challenges

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course is the second in the Community Health Interventions sequence. In this course, students focus on three serious community health problems that introduce different challenges to effective community organization and intervention in community health. Students analyze the effects of adverse childhood events, substance abuse, and childhood asthma on community health.

MSCM 5401

Strategies for Professional Success I

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: MSCM Program or PD permission.

Students will learn strategies for effective goal setting, time management, learning and communicating. An emphasis will be placed on written communication in Learning Strategies 1.

MSCM 5402

Strategies for Professional Success II

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSCM 5401

Students will learn strategies for effective problem solving, will learn to solve problems that affect different types of stakeholders, and will learn how to present the results of solving problems and other material, in ways that are clear and compelling for different audiences.

MSCM 5498

Materials and Methods for Community Engagement Capstone

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: MSCM Program or PD permission.

The focus of the Capstone experience is to provide students with hands on learning on building relationships and deepening understanding of communities. In Capstone 1 during Year 1 students will learn tools for assessing the communities social contexts, health concerns and problems, and the upstream causes of concerns and problems. In Capstone 2 during Year Two, the focus is to select a

specific community, one specific upstream cause, and either organize a program to address that concern or problem or join a program in the community already underway and use what they have learned to improve it.

MSCM 5499

Advanced Materials and Methods for Community Engagement Capstone

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSCM 5498

The focus in Capstone I (during Year 1) is to teach students how to characterize the health concerns and problems of the community and how to identify the upstream causes of those concerns and problems. The present course is the second in the two-year sequence for Capstone 1, and prepares students for Capstone II (during Year 2), where they will conduct an original piece of research on an issue of concern in a community. In order to prepare students to conduct original research, we have two goals. First, we focus on how to identify and critically evaluate relevant research that has been reported by others. Second, we consider how to formulate hypotheses and conduct novel research. This course reviews the foundations of research and considers the essential features of solid research.

MSCM 5501

Direct-to-Community Healthcare

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: MSCM program or PD permission

In this course, the students progress through units that explore the development of ventures designed to improve health and lower the burden of preventable illness and injury in target communities. Students analyze the design and implementation of successful ventures and learn the skills and tools necessary to develop their own venture proposal.

MSCM 5502

Advanced Direct-to-Community Healthcare

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

In this course, students progress through units that explore the development of ventures designed to improve health and lower the burden of preventable illness and injury in target communities. Students will analyze case studies of successful ventures and ultimately develop their own venture proposal.

MSCM 5601

Motivation, Change, and Leadership

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: MSCM program or PD permission

Motivation, Change, and Leadership I is designed to introduce the principles and practices for motivating change within organizational and community settings. Students use active learning (such as case studies, focused discussion, problem-solving, and role-playing class exercises) to evaluate effective leadership, analyze opportunities for change, and determine how to lead through change. This first course (of a two-course sequence) focuses on organizations and communities, the second course focuses on individuals and families.

MSCM 5602

Advanced Motivation, Change, and Leadership

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSCM 5601

This course addresses motivation and change at the level of individuals and families. Students will explore major theories and models of behavior change utilized in relevant health care interventions. We will analyze effectiveness of behavioral interventions by considering results of salient case studies and explore reasons why most behavior interventions are not effective in the long term. Finally, we will consider how individuals can become effective leaders.

MSCM 5997

Community Engagement Capstone Project

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: All Terms

Pre-requisites: Project must be approved by the Program Director

During the semester-based capstone project, students will gather data on their chosen community, focusing on areas for improvement, and then develop and implement an intervention plan.

MSCM 5998

Community Engagement Capstone Project

School: School of Health Sciences/Henry E. Riggs School of Applied Life Sciences

Course Credit: 6.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSCM 5499

During the year-long capstone project, students will gather data on their chosen community, focusing on areas for improvement, and then develop and implement an intervention plan.

MSPA 5101

PA Professional Practice

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

PA Practice I is the first course in a four-course series designed to prepare students for professional practice as a physician assistant (PA). The course series covers essential professional issues common to practicing PAs, including legislation, professionalism, medical ethics, and the business of health care. Throughout the series, a special emphasis is also placed on the development of leadership skills. This specific course includes the historical development of the PA profession, academic and professional conduct, PA practice laws; and the interprofessional team.

MSPA 5102

PA Professional Practice II

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSPA 5101

PA Practice II is the second course in a four-course series designed to prepare students for professional practice as a physician assistant (PA). The course series covers essential professional issues common to practicing PAs, including legislation, professionalism, medical ethics, and the business of health care.

Throughout the series, a special emphasis is also placed on the development of leadership skills. This specific course provides in-depth instruction on medical ethics and important social topics in patient care, including violence, substance abuse, end-of-life issues, human sexuality, and provider wellness.

MSPA 5103

PA Professional Practice III

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Summer Terms

Pre-requisites: Pre-req: MSPA 5102

PA Practice III is the third course in a four-course series designed to prepare students for professional practice as a physician assistant (PA). The course series covers essential professional issues common to practicing PAs, including legislation, professionalism, medical ethics, and the business of health care. Throughout the series, a special emphasis is also placed on the development of leadership skills. This specific course provides in-depth instruction on the business of health care, including coding, billing, healthcare delivery systems, health policy, and entrepreneurship.

MSPA 5104

PA Professional Practice IV

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSPA 5103

PA Practice IV is the final course in a four-course series designed to prepare students for professional practice as a physician assistant (PA). The course series covers essential professional issues common to practicing PAs, including legislation, professionalism, medical ethics, and the business of health care. Throughout the series, a special emphasis is also placed on the development of leadership skills. This specific course helps transition students into the clinical phase and beyond by providing a clinical year orientation, as well as in-depth instruction on PA licensure, certification, and credentialing. This course also focuses on patient safety, risk management, quality improvement, and the prevention of medical errors.

MSPA 5121

Basic Medical Sciences

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This foundational course covers fundamental concepts of biomedical sciences, including clinical microbiology and clinical genetics with special focus on underlying genetic and molecular mechanisms of health and disease throughout the human lifespan. An introduction to concepts in clinical medicine and pharmacotherapeutics covers the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, differential diagnosis, comprehensive management, and prognosis for diseases and conditions related to infectious disease and hematology. Available pharmacotherapeutic agents pertaining to these systems will be reviewed, along with instruction in preventive, emergent, acute, chronic, rehabilitative, palliative, and end-of-life care. This course will enable students to develop foundational clinical reasoning and problem-solving skills required to work through patient cases effectively.

MSPA 5131

Patient Assessment I

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Patient Assessment I is the first course in a four-course series designed to develop the clinical, technical, interpersonal, and communication skills required to assess patients across the lifespan. This introductory course includes instruction on eliciting a complete medical history, obtaining vital signs, performing a general survey, oral presentation, and written documentation. An additional focus of this course is the use of sensitivity, empathy, professionalism, and cultural awareness to communicate with diverse patient populations effectively. This course includes laboratory practice sessions and laboratory practical exams to evaluate medical interviewing and physical examination skills.

MSPA 5132

Patient Assessment II

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSPA 5131

Patient Assessment I is the first course in a four-course series designed to develop the clinical, technical, interpersonal, and communication skills required to assess patients across the lifespan. This introductory course includes instruction on eliciting a complete medical history, obtaining vital signs, performing a general survey, oral presentation, and written documentation. An additional focus of this course is the use of sensitivity, empathy, professionalism, and cultural awareness to communicate with diverse patient populations effectively. This course includes laboratory practice sessions and laboratory practical exams to evaluate medical interviewing and physical examination skills.

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MSPA 5133

Patient Assessment III

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Summer Terms

Pre-requisites: Pre-req: MSPA 5132

Patient Assessment III is the third course in a four-course series designed to develop the clinical, technical, interpersonal, and communication skills required to assess patients across the lifespan effectively. This course includes instruction on eliciting a complete medical history, performing a comprehensive physical examination, oral presentation, and written documentation. The course topics follow a systems-based approach in alignment with the Clinical Medicine course series. This course includes laboratory practice sessions and laboratory practical exams to evaluate medical interviewing and physical examination skills.

MSPA 5134

Patient Assessment IV

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSPA 5133

Patient Assessment IV is the final course in a four-course series designed to develop the clinical, technical, interpersonal, and communication skills required to assess patients across the lifespan effectively. This course includes instruction on eliciting a complete medical history, performing a comprehensive physical examination, oral presentation, and written documentation. The course topics follow a systems-based approach in alignment with the Clinical Medicine course series. This course includes laboratory practice sessions and laboratory practical exams to evaluate medical interviewing and physical examination skills.

MSPA 5141

Clinical and Diagnostic Skills I

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Clinical and Diagnostic Skills I is the first course in a four-course series designed to develop the clinical

and technical skills required to perform diagnostic evaluations and clinical procedures. The course provides in-depth instruction on laboratory and diagnostic studies, including their proper selection and interpretation. Students also enhance their technical skills to perform common clinical procedures proficiently. In alignment with the Clinical Medicine course series, this course utilizes a systems-based approach and consists of practical laboratory sessions. This specific course includes an introduction to basic diagnostic studies and clinical procedures, with foundational instruction on laboratory and diagnostic studies, as well as the concepts of standard precautions, informed consent, and sterile technique.

MSPA 5142

Clinical and Diagnostic Skills II

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MSPA 5141

Clinical and Diagnostic Skills II is the second course in a four-course series designed to develop the clinical and technical skills required for performing diagnostic evaluations and clinical procedures. The course provides in-depth instruction on laboratory and diagnostic studies, including their proper selection and interpretation. Students also enhance their technical skills to perform common clinical procedures proficiently. In alignment with the Clinical Medicine course series, this course utilizes a systems-based approach and consists of practical laboratory sessions.

MSPA 5143

Clinical and Diagnostic Skills III

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Summer Terms

Pre-requisites: Pre-req: MSPA 5142

Clinical and Diagnostic Skills III is the third course in a four-course series designed to develop the clinical and technical skills required for performing diagnostic evaluations and clinical procedures. The course provides in-depth instruction on laboratory and diagnostic studies, including their proper selection and interpretation. Students also enhance their technical skills to perform common clinical procedures proficiently. In alignment with the Clinical Medicine course series, this course utilizes a systems-based approach and consists of practical laboratory sessions.

MSPA 5144

Clinical and Diagnostic Skills IV

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSPA 5143

Clinical and Diagnostic Skills IV is the final course in a four-course series designed to develop the clinical and technical skills required for performing diagnostic evaluations and clinical procedures. The course provides in-depth instruction on laboratory and diagnostic studies, including their proper selection and interpretation. Students also enhance their technical skills to perform common clinical procedures proficiently. In alignment with the Clinical Medicine course series, this course utilizes a systems-based approach and consists of practical laboratory sessions.

MSPA 5151

Evidence-Based Medicine

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The Evidence-based Medicine course is designed to guide students through the search, interpretation, and practical application of evidence-based medical literature. The course includes in-depth instruction on accessing medical literature databases, framing of research questions, interpretation of basic biostatistical methods, types of sampling methods, and the limits of medical research.

MSPA 5161

Community Health

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The Community Health course prepares students to identify and address the local community health needs through personalized care and education. Course instruction includes public health, patient education and counseling, and health literacy. In an effort to reduce health disparities, this course also develops the cultural competence required to care for diverse populations effectively.

MSPA 5171

Medical Anatomy and Physiology

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This foundational course provides an intensive study of human physiology and normal and abnormal human anatomy. Emphasis will be placed on the application of the content to clinical practice. Through the use of anatomic models and virtual interactive cadaver dissection technology, students develop a fundamental knowledge of spatial relationships between anatomical structures as well as the structure, function, and pathology of the various body systems. An emphasis is also placed on anatomical and physiological changes that occur across the lifespan.

MSPA 5201

Clinical Medicine I

School: School of Health Sciences

Course Credit: 6.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Clinical Medicine I is the first course in a three-course series designed to present an integrated and systems-based approach to medical care across the lifespan. This course series provides an intensive review of human diseases and clinical conditions, including their etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, differential diagnosis, comprehensive management, and prognosis. In-depth instruction throughout the series also covers various types of care, including preventive, emergent, acute, chronic, rehabilitative, palliative, and end-of-life. Through integration with concurrent courses, students develop the clinical reasoning and problem-solving skills required to work through patient cases effectively. This specific course includes the hematologic system, infectious diseases, dermatologic system, eyes, ears, nose, and throat (EENT), and pulmonary system.

MSPA 5202

Clinical Medicine II

School: School of Health Sciences

Course Credit: 6.0

Terms Offered: Summer Terms

Pre-requisites: Pre-req: MSPA 5201

Clinical Medicine II is the second course in a three-course series designed to present an integrated and systems-based approach to medical care across the lifespan. This course series provides an intensive review of human diseases and clinical conditions, including their etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, differential diagnosis, comprehensive management, and prognosis. In-depth instruction throughout the series also covers various types of care, including preventive, emergent, acute, chronic, rehabilitative, palliative, and end-of-life. Through integration with concurrent courses, students develop the clinical reasoning and problem-solving skills required to work

through patient cases effectively. This specific course includes the cardiovascular system, gastrointestinal system/nutrition, renal system, endocrine system, and musculoskeletal system.

MSPA 5203

Clinical Medicine III

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSPA 5202

Clinical Medicine III is the final course in a three-course series designed to present an integrated and systems-based approach to medical care across the lifespan. This course series provides an intensive review of human diseases and clinical conditions, including their etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, differential diagnosis, comprehensive management, and prognosis. In-depth instruction throughout the series also covers various types of care, including preventive, emergent, acute, chronic, rehabilitative, palliative, and end-of-life.
Through integration with concurrent courses, students develop the clinical reasoning and problem-solving skills required to work through patient cases effectively. This specific course includes the genitourinary system; reproductive system; pediatrics; and geriatrics.

MSPA 5211

Pharmacotherapeutics I

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Pharmacotherapeutics I is the first course in a three-course series designed to provide an integrated and systems-based approach to the pharmacotherapeutic management of diverse patient populations. Pharmacotherapeutics I begins with instruction on basic pharmacological principles (i.e., pharmacokinetics, pharmacodynamics, and pharmacogenetics) in order to develop foundational knowledge required for proper therapeutic management. In conjunction with MSPA 5201 Clinical Medicine I, each course in the series provides an intensive study of the major pharmacotherapeutic agents (prescription and nonprescription) for each system.

MSPA 5212

Pharmacotherapeutics II

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Summer Terms

Pre-requisites: Pre-req: MSPA 5211

Pharmacotherapeutics II is the second course in a three-course series designed to provide an integrated and systems-based approach to the pharmacotherapeutic management of diverse patient populations. In conjunction with MSPA 5202 Clinical Medicine II, each course in the series provides an intensive study of the major pharmacotherapeutic agents (prescription and nonprescription) for each system.

MSPA 5213

Pharmacotherapeutics III

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSPA 5212

Pharmacotherapeutics III is the final course in a three-course series designed to provide an integrated and systems-based approach to the pharmacotherapeutic management of diverse patient populations. In conjunction with MSPA 5203 Clinical Medicine III, each course in the series provides an intensive study of the major pharmacotherapeutic agents (prescription and nonprescription) for each system.

MSPA 5221

Clinical Integration and Application I

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Clinical Integration and Application I is the first course in a three-course series using a holistic approach to develop the clinical reasoning and problem-solving skills required for effective patient care. Through integration with concurrent courses, students apply their systems-based medical knowledge to work through patient cases in a small group format, as well as evaluate patients in clinical settings. This course also includes interprofessional case-based learning to foster effective communication and collaboration between healthcare professionals.

MSPA 5222

Clinical Integration and Application II

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Summer Terms

Pre-requisites: Pre-req: MSPA 5221

Clinical Integration and Application II is the second course in a three-course series using a holistic approach to develop the clinical reasoning and problem-solving skills required for effective patient care. Through integration with concurrent courses, students apply their systems-based medical knowledge to work through patient cases in a small group format, as well as evaluate patients in clinical settings. This course also includes interprofessional case-based learning to foster effective communication and collaboration between healthcare professionals.

MSPA 5223

Clinical Integration and Application III

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSPA 5222

Clinical Integration and Application III is the final course in a three-course series using a holistic approach to develop the clinical reasoning and problem-solving skills required for effective patient care. Through integration with concurrent courses, students apply their systems-based medical knowledge to work through patient cases in a small group format, as well as evaluate patients in clinical settings. This course also includes interprofessional case-based learning to foster effective communication and collaboration between healthcare professionals.

MSPA 5401

Fundamentals of Surgery and Emergency Medicine

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This advanced course focuses on the proper evaluation and management of surgical and emergent conditions. The course provides in-depth instruction on surgical care (pre-operative, intraoperative, and post-operative), as well as the clinical and technical skills required for surgical and emergency procedures. An additional emphasis is also placed on cardiac life support protocols, resuscitation, and procedures.

MSPA 6101

Advanced PA Professional Practice I

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Advanced PA Professional Practice I is the first course in a three-course series designed to transition students into professional practice as a physician assistant (PA). The course series guides students through the design, development, and completion of the Capstone Project. The course series also includes current topics in clinical medicine, board review, and preparing to enter the PA job market. By building upon the Evidence-Based Medicine course, this specific course guides students through the design and planning of the Capstone Project.

MSPA 6102

Advanced PA Professional Practice II

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Summer Terms

Pre-requisites: Pre-req: MSPA 6101

Advanced PA Professional Practice II is the second course in a three-course series designed to transition students into professional practice as a physician assistant (PA). The course series guides students through the design, development, and completion of the Capstone Project. The course series also includes current topics in clinical medicine, board review, and preparing to enter the PA job market. This specific course guides students through the development of the Capstone Project, as well as provides MAT (Medication Assisted Treatment) Waiver training.

MSPA 6103

Advanced PA Professional Practice III

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSPA 6102

Advanced PA Professional Practice III is the final course in a three-course series designed to transition students into professional practice as a physician assistant (PA). The course series guides students through the design, development, and completion of the Capstone Project. The course series also includes current topics in clinical medicine, board review, and preparing to enter the PA job market. This specific course is the conclusion of the Capstone Project. The course also includes intensive board review, preparation for job applications and interviews, as well as the Summative Evaluation.

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MSPA 6104

PANCE Review Course

School: School of Health Sciences

Course Credit: 0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: MSPA 6103

The PANCE review course takes place at the completion of the clinical phase. Students attend an in-person review to prepare them for the Physician Assistant National Certifying Examination. Topics covered are in alignment with the PANCE Blueprint, and knowledge checks are completed using practice questions. Students must attend this course in order to successfully complete the program.

MSPA 6111

Supervised Clinical Practice Experience I

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Spring Terms

Pre-requisites: N/A

The six-week Family Medicine supervised clinical practice experience (SCPE) focuses on the professional and clinical role of the physician assistant in Family Medicine. By integrating evidence-based medicine with medical knowledge gained during the didactic phase, students refine their clinical, technical, clinical reasoning, and problem-solving skills within a supervised clinical setting. Students also advance their interpersonal and communication skills to foster effective patient care and interprofessional collaboration. The Family Medicine SCPE enables students to meet the skill-based learning outcomes and professionalism expectations required to enter clinical PA practice successfully and provide equitable care to diverse patients.

MSPA 6112

Supervised Clinical Practice Experience II

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Spring Terms

Pre-requisites: N/A

The second six-week supervised clinical practice experience (SCPE) focuses on the professional and clinical role of the physician assistant in one of eight clinical disciplines. By integrating evidence-based medicine with medical knowledge gained during the didactic phase, students refine their clinical, technical, clinical reasoning, and problem-solving skills within a supervised clinical setting. Students also

advance their interpersonal and communication skills to foster effective patient care and interprofessional collaboration. The SCPE enables students to meet the skill-based learning outcomes and professionalism expectations required to enter clinical PA practice successfully and provide equitable care to diverse patients.

MSPA 6113

Supervised Clinical Practice Experience III

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Spring Terms

Pre-requisites: N/A

The third six-week supervised clinical practice experience (SCPE) focuses on the professional and clinical role of the physician assistant in one of eight clinical disciplines. By integrating evidence-based medicine with medical knowledge gained during the didactic phase, students refine their clinical, technical, clinical reasoning, and problem-solving skills within a supervised clinical setting. Students also advance their interpersonal and communication skills to foster effective patient care and interprofessional collaboration. The SCPE enables students to meet the skill-based learning outcomes and professionalism expectations required to enter clinical PA practice successfully and provide equitable care to diverse patients.

MSPA 6114

Supervised Clinical Practice Experience IV

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Summer Terms

Pre-requisites: N/A
The fourth six-week supervised clinical practice experience (SCPE) focuses on the professional and clinical role of the physician assistant in one of eight clinical disciplines. By integrating evidence-based medicine with medical knowledge gained during the didactic phase, students refine their clinical, technical, clinical reasoning, and problem-solving skills within a supervised clinical setting. Students also advance their interpersonal and communication skills to foster effective patient care and interprofessional collaboration. The SCPE enables students to meet the skill-based learning outcomes and professionalism expectations required to enter clinical PA practice successfully and provide equitable care to diverse patients.

MSPA 6115

Supervised Clinical Practice Experience V

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Summer Terms

Pre-requisites: N/A

The fifth six-week supervised clinical practice experience (SCPE) focuses on the professional and clinical role of the physician assistant in one of eight clinical disciplines. By integrating evidence-based medicine with medical knowledge gained during the didactic phase, students refine their clinical, technical, clinical reasoning, and problem-solving skills within a supervised clinical setting. Students also advance their interpersonal and communication skills to foster effective patient care and interprofessional collaboration. The SCPE enables students to meet the skill-based learning outcomes and professionalism expectations required to enter clinical PA practice successfully and provide equitable care to diverse patients.

MSPA 6116

Supervised Clinical Practice Experience VI

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The sixth six-week supervised clinical practice experience (SCPE) focuses on the professional and clinical role of the physician assistant in one of eight clinical disciplines. By integrating evidence-based medicine with medical knowledge gained during the didactic phase, students refine their clinical, technical, clinical reasoning, and problem-solving skills within a supervised clinical setting. Students also advance their interpersonal and communication skills to foster effective patient care and interprofessional collaboration. The SCPE enables students to meet the skill-based learning outcomes and professionalism expectations required to enter clinical PA practice successfully and provide equitable care to diverse patients.

MSPA 6117

Supervised Clinical Practice Experience VII

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The seventh six-week supervised clinical practice experience (SCPE) focuses on the professional and clinical role of the physician assistant in one of eight clinical disciplines. By integrating evidence-based medicine with medical knowledge gained during the didactic phase, students refine their clinical, technical, clinical reasoning, and problem-solving skills within a supervised clinical setting. Students also advance their interpersonal and communication skills to foster effective patient care and interprofessional collaboration. The SCPE enables students to meet the skill-based learning outcomes and professionalism expectations required to enter clinical PA practice successfully and provide equitable care to diverse patients.

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MSPA 6118

Supervised Clinical Practice Experience VIII

School: School of Health Sciences

Course Credit: 5.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The eighth six-week supervised clinical practice experience (SCPE) focuses on the professional and clinical role of the physician assistant in one of eight clinical disciplines. By integrating evidence-based medicine with medical knowledge gained during the didactic phase, students refine their clinical, technical, clinical reasoning, and problem-solving skills within a supervised clinical setting. Students also advance their interpersonal and communication skills to foster effective patient care and interprofessional collaboration. The SCPE enables students to meet the skill-based learning outcomes and professionalism expectations required to enter clinical PA practice successfully and provide equitable care to diverse patients.

OCTH 6100

Foundations of Occupational Therapy and Occupational Science

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Foundations of Occupational Therapy and Occupational Science provides an overview of relevant historical and philosophical roots of the profession, scope and areas of practice, professional and intra-professional roles, modes of service delivery, and ethical decision making. The course explores models of practice, frameworks, and occupational science sources to inform professional reasoning to meet the future occupational needs of society. It also addresses professional engagement, development, and growth.

OCTH 6110

Lifestyle, Health Equity, and Occupational Justice

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Lifestyle, Health Equity, and Occupational Justice addresses key sociocultural, socioeconomic, political, geographic, demographic, and diversity factors impacting service delivery and occupational health and well-being for persons, groups, and populations. With a focus across the lifespan, the course looks at social determinants of health and disparities and their influence on health behavior and lifestyle. Using an occupational justice and health equity lens, the course explores how policy, service delivery, and a lifestyle medicine approach can help meet real world occupational needs.

OCTH 6120

Anatomy, Physiology, and Movement for Occupational Participation

School: School of Health Sciences

Course Credit: 4.5

Terms Offered: Fall Terms

Pre-requisites: N/A

Anatomy, Physiology, and Movement for Occupational Participation provides foundational knowledge about the structure, function, and movement of the human body as it relates to occupations in daily life. With a focus on pairing structures with the principles of kinesiology and biomechanics, the course creates a deep understanding of how movement enables engagement with the world.

OCTH 6130

Psychosocial OT: Frameworks & Evaluation

School: School of Health Sciences

Course Credit: 3.0
Terms Offered: Fall Terms

Pre-requisites: N/A

Psychosocial Occupational Therapy: Framing and Evaluation explores psychosocial factors and mental health conditions impacting occupational performance across the lifespan. By introducing psychosocial theories, models of practice, and frames of reference, the course provides structure for guiding client-centered screening and evaluation methods in a variety of practice settings while considering cultural, lifestyle, and contextual factors. The course emphasizes the development of therapeutic use of self, communication skills, and observation techniques. With a focus on administration and interpretation of standardized and non-standardized assessment tools relevant to psychosocial disorders and mental health conditions, the course bridges evaluation results to inform treatment planning.

OCTH 6140

Psychosocial OT: Intervention and Outcomes

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Psychosocial Occupational Therapy: Intervention and Outcomes aims to develop professional reasoning for using client-centered occupations as the primary modality for intervention to help clients achieve desired outcomes. The course emphasizes utilizing evidence to inform decision making and applying appropriate psychosocial theories, models of practice, and frames of reference to guide the occupational therapy process for clients experiencing psychosocial and mental health conditions, including dual diagnoses. Therapeutic use of self will serve as a foundation for learning group processes and dynamics. The course also considers the importance of self-care as a healthcare professional and lifestyle factors to promote stress resilience and well-being to support care provision of persons, communities, and populations.

OCTH 6150

Introduction to Fieldwork

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Introduction to Fieldwork and Capstone aims to provide foundational learning to promote success in the experiential education courses throughout the curriculum. The course introduces experiential course series objectives, policies and procedures, professional expectations, communication skills, and self-reflective learning. Exploring various types of traditional, non-traditional, and role-emerging fieldwork and capstone settings creates a clear picture of potential professional trajectories.

OCTH 6160

Introduction to Capstone

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Introduction to Capstone aims to provide foundational learning to promote success in the experiential education courses throughout the curriculum. The course introduces experiential course series objectives, policies and procedures, professional expectations, communication skills, and self-reflective learning. Exploring various types of traditional, non-traditional, and role-emerging capstone settings creates a clear picture of potential professional trajectories.

OCTH 6180

Fieldwork Level I A

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Fieldwork Level I A enriches didactic coursework through various directed experiences and observations. The course provides experiential learning opportunities in a community-based setting working with persons, groups, or communities. With a focus on identifying the psychosocial aspects influencing engagement and participation, the course enables an understanding of the role of occupational therapy in community-based settings and identifies innovative and emerging roles for occupational therapy professionals outside of traditional contexts.

OCTH 6200

Neuroscience for Occupational Participation

School: School of Health Sciences

Course Credit: 4.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Neuroscience for Occupational Participation delves into the complex world of the human neurological system as central to understanding occupational performance and relating to the world. With a focus on the function of structures and systems, the course aims to provide a rich foundational understanding of neuroscience, human behavior, and relevant pathological conditions across the lifespan.

OCTH 6220

Therapeutic Use of Occupation

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Therapeutic Use of Occupation delves into the world of activity analysis as a central skill for occupational therapists to assess client occupational performance and formulate intervention plans. The course provides engaged opportunities for doing by actively exploring areas of occupation, performance skills, performance patterns, contexts, environments, and client factors. Through applying, analyzing, and evaluating the interaction of occupation and activity, the course builds skills in therapeutic use of self and facilitating engagement in daily life.

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OCTH 6230

Adults and Older Adults I: Frameworks & Evaluation

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Adult and Older Adult Occupational Therapy I - Framing and Evaluation explores normative and diverse development influencing a wide range of occupational experiences within the adult and older adult populations. In the context of these age ranges, the course delves into common general medical and orthopedic conditions impacting occupational performance. Through analysis and application of theories, models of practice, and frames of reference, the course provides structure for guiding client-centered screening and evaluation methods while considering cultural, lifestyle, and contextual factors. The course emphasizes development of occupational performance analysis skills through an understanding of client factors, performance skills, activity demands, and the clients contexts. With a focus on administration and interpretation of standardized and non-standardized assessment tools relevant to adults and older adults, the course bridges evaluation results to inform treatment planning and develops skills necessary to report evaluation findings in a systematic manner.

OCTH 6240

Adult and Older Adult Occupational Therapy I: Intervention and Outcomes

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Adult and Older Adult Occupational Therapy I: Intervention and Outcomes aims to develop professional reasoning for using client-centered occupations as the primary modality for intervention to help clients achieve desired outcomes. The course emphasizes utilizing evidence to inform decision making and applying appropriate theories, models of practice, and frames of reference to guide intervention and discharge planning for clients experiencing orthopedic and general medical conditions. Integrating the pillars of lifestyle medicine serves as a means for promoting health and well-being through occupational participation. Examining different service delivery models provides an understanding of reimbursement systems, funding mechanisms, and documentation practices necessary to communicate the rationale for occupational therapy services in a wide variety of settings. The course also offers patient care skills to ensure safety of self and others.

OCTH 6250

Research and Evidence in Occupational Therapy Practice I

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Research and Evidence in Occupational Therapy Practice I serves as an introduction to understanding the value and importance of scholarship and evidence for supporting the profession. The course addresses research design and methods, the process of literature review, quantitative statistics, and qualitative analysis for the initial steps of designing and implementing a scholarly study. As relevant for human-subject research, educational research, or research related to population health, the course considers the importance of ethical policies and procedures. Additionally, the course covers critique, analysis, and evaluation of scholarship for evidence-based decision making.

OCTH 6260

OT Practitioner as Educator, Contemporary Leader, and Manager

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course covers different aspects of OT practitioners as Educators, Contemporary Leaders, and Managers. As a part of their educator role, students learn to develop teaching skills applicable to academic and clinical education through the examination of adult learning theory principles, health literacy, and the application of innovative instructional design. The course further introduces skills necessary to design and deliver educational materials and learning experiences for students, clients, caregivers, communities, colleagues, other health providers, and the public. Students will explore aspects of leadership and management for coordinating care, case management, and transitional services in traditional and emerging practice areas. This includes understanding the unique roles of occupational therapists, occupational therapy assistants, and interprofessional team dynamics within a wide range of contexts. By introducing a variety of leadership theories, the course provides the structure for developing collaboration and supervision skills in various practice settings. The course further explores the roles of fieldwork educator, capstone mentor, and faculty member and also evaluates business aspects of practice including marketing services, analyzing programs for improvement and quality, and identifying strategies for effective and competent supervision of personnel.

OCTH 6280

Fieldwork Level IB

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Fieldwork Level I B enriches coursework through various directed experiences and observations by promoting application of knowledge in adult and older adult practice settings. The course serves as an

opportunity to engage in the occupational therapy process, including client screening and evaluation, and demonstrating the use of occupation as both intervention and outcome.

OCTH 6330

Adult and Older Adult Occupational Therapy II: Frameworks & Evaluation

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Summer Terms

Pre-requisites: N/A

Adult and Older Adult Occupational Therapy II: Frameworks & Evaluation explores normative and diverse development influencing a wide range of occupational experiences within the adult and older adult populations. In the context of these age ranges, the course delves into common neurological conditions impacting occupational performance. Through analysis and application of theories, models of practice, and frames of reference, the course provides structure for guiding client-centered screening and evaluation methods while considering cultural, lifestyle, and contextual factors. The course emphasizes development of occupational performance analysis skills through an understanding of client factors, performance skills, activity demands, and the clients contexts. With a focus on administration and interpretation of standardized and non-standardized assessment tools relevant to adults and older adults, the course bridges evaluation results to inform treatment planning and develops skills necessary to report evaluation findings in a systematic manner.

OCTH 6340

Adult and Older Adult Occupational Therapy II: Intervention and Outcomes

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Summer Terms

Pre-requisites: N/A

Adult and Older Adult Occupational Therapy II: Intervention and Outcomes aims to develop professional reasoning for using client-centered occupations as the primary modality for intervention to help clients achieve desired outcomes. The course emphasizes utilizing evidence to inform decision making and applying appropriate theories, models of practice, and frames of reference to guide intervention and discharge planning for clients experiencing neurological conditions. Integrating the pillars of lifestyle medicine serves as a means for promoting health and well-being through occupational participation. Examining different service delivery models provides an understanding of reimbursement systems, funding mechanisms, and documentation practices necessary to communicate the rationale for occupational therapy services in a wide variety of settings. The course will also offer an understanding of patient care skills to ensure safety of self and others an understanding of patient care skills to ensure safety of self and others.

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OCTH 6350

Research and Evidence in Occupational Therapy Practice II

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Summer Terms

Pre-requisites: N/A

Research and Evidence in Occupational Therapy Practice II delves into the process of data collection, application and interpretation of quantitative and qualitative data for a scholarly project to contribute to the body of knowledge. Building upon previous skills, interpretation of tests and measurements further develops evidence-based decision-making abilities.

OCTH 6380

Fieldwork Level I C

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Summer Terms

Pre-requisites: N/A

Fieldwork Level IC integrates knowledge of occupational needs of the adult and older populations into practice. The course further develops skills learned in the curriculum through use of simulated environments, standardized patients, and virtual learning opportunities. Through guided experiences, the course provides an opportunity to further refine skills in professional reasoning and utilizing occupation as both an intervention and therapeutic outcome.

OCTH 6390

Capstone Exploration

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Summer Terms

Pre-requisites: N/A

Capstone Exploration cultivates professional identity and initiates preparation for the doctoral capstone. In the course, strength-based self- assessment and reflection lead to a professional development plan that guides the capstone process. Through guided inquiry, the course explores potential capstone areas of interest by examining current philosophies, service delivery models, and sociopolitical factors influencing the profession in order to identify innovative opportunities to address society’s current and future occupational needs.

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OCTH 7400

Advocacy, Policy, and Ethics

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

Advocacy, Policy, and Ethics explores the impact of policy, socioeconomic, political, geographic factors, among others to improve the accessibility and delivery of occupational therapy services to persons, groups, and populations. The course addresses ethical principles for guiding professional conduct in a variety of contexts. With a focus on advocacy and occupational justice, the course also explores legislation, regulations, and standards of practice which inform practice and policy in existing and emerging service delivery models.

OCTH 7410

Pharmacotherapeutics for Occupational Participation

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

Pharmacotherapeutics for Occupational Participation explores medications commonly used for conditions typically treated in occupational therapy contexts. The course provides a basic understanding of the relationship between medications and occupational performance, administration and usage, and common side effects.

OCTH 7430

Pediatric Occupational Therapy I: Frameworks & Evaluation

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Pediatric Occupational Therapy I - Frame and Evaluation explores early childhood development and a wide range of occupational experiences within this population, as well as common conditions impacting occupational performance. Through analysis and application of pediatric theories, models of practice, and frames of reference, the course provides structure for guiding client-centered screening and evaluation methods in a variety of practice settings while considering cultural, lifestyle, and contextual factors. The

course emphasizes development of occupational performance analysis skills through an understanding of client factors, performance skills, activity demands, and the clients contexts. With a focus on administration and interpretation of standardized and non-standardized assessment tools relevant to a family-centered, whole-child approach, the course bridges evaluation results to inform treatment planning and develops skills necessary to report evaluation findings in a systematic manner.

OCTH 7440

Pediatric Occupational Therapy I: Intervention and Outcomes

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Pediatric Occupational Therapy I: Intervention and Outcomes aims to develop professional reasoning for using client-centered occupations as the primary modality for intervention to help pediatric clients achieve desired outcomes. The course emphasizes utilizing evidence to inform decision making and applying appropriate pediatric theories, models of practice, and frames of reference to guide intervention and discharge planning in early childhood settings. Applicable pillars of lifestyle medicine are explored to promote a family-centered, holistic approach to occupational participation. Examining different service delivery models provides an understanding of reimbursement systems, funding mechanisms, and documentation practices necessary to communicate the rationale for occupational therapy services in a variety of pediatric settings.

OCTH 7450

Research and Evidence in Occupational Therapy Practice III

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Research and Evidence in Occupational Therapy Practice III continues to build upon knowledge and skills from the first two courses in the series and culminates with analyzing and interpreting data, discussing implications for practice, and preparing and presenting a scholarly report for dissemination to relevant audiences. The course also focuses on the further development and bridging of evidence-based decision-making skills to areas of professional interest.

OCTH 7470

Learning, Building, and Developing Skills for Pediatric Feeding Therapy

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

The occupational therapy practice is a continuous learning and development journey in service of others. This elective course is intended to build the knowledge needed in pediatric feeding therapy, learn about the intersections of the occupation of feeding, and develop foundational skills as a feeding and swallowing occupational therapy practitioner. Participants in this course will expand their potential to serve people who have feeding and swallowing needs.

OCTH 7471

Prototyping Methods

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

Gain practical knowledge about commonly used prototyping methods used in medical device design from the conception to product development stages through a combination of instruction and applied mini-projects. Topics are in the categories of (a) identifying goals in prototyping, (b) method selection, (c) material forming methods, (d) material joining methods, and (e) planning for scalable design.

OCTH 7480

Fieldwork Level I D

School: School of Health Sciences

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Fieldwork Level ID promotes integrating knowledge about the occupational needs of children into practice and further develops skills learned in the curriculum through use of simulated environments, standardized patients, and virtual learning opportunities and/or actual patients. The course provides an opportunity to further discover professional reasoning and self-reflective skills required to treat pediatric clients from a family-centered, whole-child approach. Students will utilize case-based learning through virtual Simucase and/or actual clinical experiences and other resources.

OCTH 7490

Innovative Program Development and Entrepreneurship

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Innovative Program Development and Entrepreneurship develops skills to expand the profession of occupational therapy. Exploring the innovative processes involved in pioneering a program or business, the course identifies sources of funding, examines sustainability, and deepens understanding of the skills required to deliver services in a wide range of settings. The course teaches the needs assessment process which allows for designing programs with evaluation methods that support occupational participation for respective persons, groups, or populations.

OCTH 7500

Lifestyle Medicine, Health, and Occupational Therapy

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Lifestyle Medicine in Occupational Therapy utilizes lifestyle medicine as a framework to inform the occupational therapy process and program development as it relates to health management and promotion. Utilizing the pillars of lifestyle medicine, the course explores the impact of social determinants of health and epidemiological factors on health, well-being, disability, and chronic physical and mental health conditions. The course addresses critical analysis of the lifestyle medicine literature to inform evidence-based decision making for the promotion of health and wellbeing for professionals themselves, clients, groups, and populations.

OCTH 7510

Assistive Technology and Innovation for Everyday Life

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Assistive Technology and Innovation for Everyday Life provides foundational knowledge about the use of technology, equipment, and devices to enhance occupational participation and quality of life. Using an occupational justice lens, the course explores how legislation and policy influence inclusion with and accessibility to assistive technology. With a focus on innovation, the course examines processes involved in designing, developing, and utilizing assistive technologies in ways that meet the unique occupational needs of persons, groups, or populations in a variety of contexts. The course fosters skill development in the assessment process as it relates to determining needs, adjusting fit, and ensuring functional use. In addition, the course emphasizes the practical value of interprofessional collaboration to enhance the design process.

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OCTH 7530

Pediatric Occupational Therapy II: Frameworks and Evaluation

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Pediatric Occupational Therapy II - Framing and Evaluation explores childhood and adolescent development and a wide range of occupational experiences within this population, as well as common conditions impacting occupational performance. Through analysis and application of pediatric theories, models of practice, and frames of reference, the course provides structure for guiding client-centered screening and evaluation methods in a variety of practice settings while considering cultural, lifestyle, and contextual factors. The course emphasizes development of occupational performance analysis skills through an understanding of client factors, performance skills, activity demands, and the clients contexts. With a focus on administration and interpretation of standardized and non-standardized assessment tools relevant to a family-centered, whole-child approach, the course bridges evaluation results to inform treatment planning and develops skills necessary to report evaluation findings in a systematic manner.

OCTH 7540

Pediatric Occupational Therapy II: Intervention and Outcomes

School: School of Health Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Pediatric Occupational Therapy II: Intervention and Outcomes aims to develop professional reasoning for using client-centered occupations as the primary modality for intervention to help pediatric children and adolescents achieve desired outcomes. The course emphasizes utilizing evidence to inform decision making and applying appropriate pediatric theories, models of practice, and frames of reference to guide intervention and discharge planning in early childhood settings. Applicable pillars of lifestyle medicine are explored to promote a family-centered, holistic approach to occupational engagement. Examining different service delivery models provides an understanding of reimbursement systems, funding mechanisms, and documentation practices necessary to communicate the rationale for occupational therapy services in a variety of pediatric settings. The course also explores the role of occupational therapy in transition services.

OCTH 7570

Introduction to Stroke: Evaluation, Assessment, and Intervention

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: N/A

Pre-requisites: N/A

This course will provide background knowledge of anatomy and physiology of stroke, as well as evaluation, assessment, and intervention that facilitate restoration, modification, and/or adaptation to the loss of functional performance following stroke. Students will gain a basic understanding of evidenced based therapeutic assessment and intervention for stroke survivors and their caregivers.

OCTH 7571

Occupational Therapy in Higher Education

School: School of Health Sciences

Course Credit: 1.5

Terms Offered: N/A

Pre-requisites: N/A

This course examines the emerging role of occupational therapy in higher education. The course will include the needs in higher education that OT can address, how to establish OT in higher education, student accessibility/disability services, the therapeutic process, program design, and marketing.

OCTH 7585

Fieldwork Seminar

School: School of Health Sciences

Course Credit: 0.5

Terms Offered: Spring Terms

Pre-requisites: N/A

Fieldwork Seminar serves to reinforce and grow previous learning in preparation for successful completion of level II fieldwork with an emphasis on professionalism, therapeutic use of self, and ethical standards.

OCTH 7590

Capstone Development

School: School of Health Sciences

Course Credit: 2.5

Terms Offered: Spring Terms

Pre-requisites: N/A

Capstone Development guides further planning of the doctoral capstone project and doctoral capstone experience. Through reflection on professional goals, the course directs collaborative development of a capstone plan and individualized memorandum of understanding based on a needs assessment and literature review. Individualized learning objectives will reflect opportunities for advanced skill development within one or more of the following areas: clinical practice skills, research, program or policy development, leadership and advocacy, administration, and/or education.

OCTH 7680

Fieldwork Level IIA

School: School of Health Sciences

Course Credit: 12.0

Terms Offered: Summer Terms

Pre-requisites: N/A

Fieldwork Level IIA is the first in a series of two full-time experiential learning courses that provides the opportunity to apply all theory and skills learned throughout didactic coursework to deliver skilled occupational therapy services under the supervision of a licensed occupational therapist. Level II fieldwork requires 12-weeks at an approved traditional, non-traditional, or role-emerging occupational therapy setting. Through active collaboration with the fieldwork educator and Academic Fieldwork Coordinator, the course provides an in-depth experience for students to engage in the occupational therapy process with a gradual reduction in supervision until the student competently performs as an entry-level therapist within the practice setting. In addition, the course promotes development of professional skills in line with the professions ethics and standards.

OCTH 8700

Occupational Therapy Professional Transitions

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Occupational Therapy Professional Transitions focuses on preparation for the transition to professional practice by introducing requirements for licensure and strategies to prepare for the National Board Certification in Occupational Therapy. Through support from Career Services, the course also teaches skills to secure employment post-graduation, including interviewing and resume writing, with an emphasis on marketing skills for non-traditional jobs. In addition, the course emphasizes the importance of professional membership, continuation of ongoing professional development, and planning for mentorship. The course also reinforces how one can enhance the role of a professional by engaging in different leadership positions at local national and international levels within organizations and agencies. Case management, care coordination, and transition services are emphasized. Students who would like to work in academic settings after graduation are provided with the necessary strategies to develop themselves as educators. The supervision strategies of both OT and non-OT personnel are focused and

how one can become effective in analyzing staff development and the professional abilities and competencies of supervised staff as they relate to job responsibilities after working as OT practitioners. Finally this course will also address the personal and professional responsibilities of OT related to varied roles of OT on a contractual basis, areas of continuous quality improvement, reimbursement systems, and ways to promote OT to various stakeholders.

OCTH 8780

Level IIB Fieldwork

School: School of Health Sciences

Course Credit: 12.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Fieldwork Level IIB is the second in a series of two full-time experiential learning courses that provides the opportunity to apply all theory and skills learned throughout didactic coursework to deliver skilled occupational therapy services under the supervision of a licensed occupational therapist. The Level II fieldwork requires 12-weeks at an approved traditional, non-traditional, or role-emerging occupational therapy setting. Through active collaboration with the fieldwork educator and Academic Fieldwork Coordinator, the course provides an in-depth experience for students to engage in the occupational therapy process with a gradual reduction in supervision until the student competently performs as an entry-level therapist within the practice setting. In addition, the course promotes development of professional skills in line with the professions ethics and standards.

OCTH 8890

Doctoral Capstone Experience

School: School of Health Sciences

Course Credit: 14.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Doctoral Capstone Experience (DCE) serves as the context for implementing the doctoral capstone project. Through collaboration with a site in the community, the capstone plan, memorandum of understanding, and evaluation are enacted over the course of 14 weeks to foster advanced skill development in one or more of the following areas: clinical practice skills, research, program or policy development, leadership and advocacy, administration, and/or education. Guided reflection throughout the DCE provides an opportunity for further development of professional identity and transformation into a scholar of practice.

OCTH 8895

Capstone Project

School: School of Health Sciences

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Capstone Project promotes synthesis and application of knowledge through completion of an individualized, increasingly self-directed doctoral capstone project during the doctoral capstone experience that demonstrates advanced skill development in an identified area of focus. The course emphasizes dissemination of capstone outcomes to relevant stakeholders and professional communities.

PDEV 5000

Team Masters Project

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: All Terms

Pre-requisites: Enrollment as 2nd year MBS , 1st year MEng of approval of instructor. Undergraduate students may apply to participate in lieu of performing a senior thesis but approval by their undergraduate institution is required.

The Team Master's Project (TMP) is the capstone activity for Master of Business and Science (MBS) students and for first-year MEng students. A passing grade in two semesters is required for graduation with an MBS or MEng degree.

PDEV 5010

Professional Development

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: N/A

Pre-requisites: N/A

In two four hour intensive workshops and a selection of modules, students learn how to build their professional presence, gain insight into the process and timing of finding employment, learn skills that will improve their competitiveness, and develop expertise at showcasing their accomplishments.

PDEV 5020

Team Masters Project

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: As Needed

Pre-requisites: Enrollment as 2nd year MBS , 1st year MEng of approval of instructor. Undergraduate students may apply to participate in lieu of performing a senior thesis but approval by their undergraduate institution is required.

The Team Master's Project (TMP) is the capstone activity for Master of Business and Science (MBS) students and for first-year MEng students. A passing grade in two semesters is required for graduation with an MBS or Meng degree.(ALS/MEB 400)

PDEV 5100

Professional Development

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

To complement the technical functional skills, the Professional Skills Development course has been integrated in the program curriculum to help students develop their professional skills. This course module includes: Campus to Corporate (Introduction), Report Writing, Office Etiquette, Email Etiquette, Networking, Presentation Skills, Communication Skills, Giving a successful interview.

PDEV 5110

Industry Internship: Company - Functional area

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: Summer Terms

Pre-requisites: N/A

An industry internship is a graduation requirement for the MBS at KGI (for all other programs it is optional). Each MBS student is required to complete a minimum of 400 hours in a paid internship with a life science company to fulfil the internship requirement, and must participate in a poster presentation following their industry internship. Students must complete both the internship and poster presentation prior to receiving credit for the internship, and before it is recorded on their official transcript.

PDEV 5120

Industry Internship: Company - Functional area

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: Fall Terms

Pre-requisites: Pre-req: Approval of Instructor

An industry internship is a graduation requirement for the MBS at KGI (for all other programs it is optional). Each MBS student is required to complete a minimum of 400 hours in a paid internship with a life science company to fulfil the internship requirement, and must participate in a poster presentation following their industry internship. Students must complete both the internship and poster presentation prior to receiving credit for the internship, and before it is recorded on their official transcript.

PDEV 5130

Spring Internship

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: Approval of Instructor

An industry internship is a graduation requirement for the MBS at KGI (for all other programs it is optional). Each MBS student is required to complete a minimum of 400 hours in a paid internship with a life science company to fulfil the internship requirement, and must participate in a poster presentation following their industry internship. Students must complete both the internship and poster presentation prior to receiving credit for the internship, and before it is recorded on their official transcript.

PDEV 5210

Life Sciences Industry Ethics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

As leaders of tomorrows bioscience industries, KGI graduates will be at the forefront in the development and application of new diagnostics, pharmaceuticals, biologics and medical devices. They will be confronted with ethical issues concerning the research, development, marketing and sale of related products. This course therefore explores the ethical challenges for commerce in the biosciences industry as it will be increasingly important for leaders to consider the ethical ramifications of their work. The class will focus more on the practical application of ethical principles through real-world case studies, rather than emphasizing theories.

PDEV 5220

Healthcare and Life Sciences Industry Ethics

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School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: N/A

As practitioners and leaders of tomorrows healthcare systems and bioscience industries, KGI graduates will be at the forefront in the development and application of new diagnostics, pharmaceuticals, biologics and medical devices. They will be confronted with ethical issues concerning the research, development, marketing and sale of related products. Stakeholders in the health systems and companies that KGI students will lead including clinical trial participants, patients, partners, employees, investors, activist groups, and the media will be paying close attention to the ethical behavior of those health systems and companies and their leaders. This course therefore explores the ethical challenges for commerce in healthcare systems and biosciences industry as it will be increasingly important for healthcare and bioscience leaders to consider the ethical ramifications of their work. The class will focus more on the practical application of ethical principles through real-world case studies, rather than emphasizing theories.

PDEV 5230

Healthcare Ethics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

As practitioners and leaders of tomorrows healthcare systems, KGI graduates will be at the forefront in the application of new treatments, diagnostics, pharmaceuticals, biologics, and medical devices. They will be confronted with ethical issues concerning the research and use of related treatments and products. Stakeholders in the health systems that KGI students will lead including clinical trial participants, patients, partners, employees, investors, activist groups, and the media will be paying close attention to the ethical behavior of those health systems and their leaders. This course therefore explores the ethical challenges for commerce in healthcare systems as it will be increasingly important for healthcare leaders to consider the ethical ramifications of their work. The class will focus more on the practical application of ethical principles through real-world case studies, rather than emphasizing theories.

PDEV 5240

Life Science Industry Ethics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: N/A

As practitioners and leaders of tomorrows bioscience industries, KGI graduates will be at the forefront in the development and application of new diagnostics, pharmaceuticals, biologics, and medical devices. They will be confronted with ethical issues concerning the research, development, marketing and sale of related products. Stakeholders in the companies that KGI students will lead including clinical trial participants, patients, partners, employees, investors, activist groups, and the media will be paying close attention to the ethical behavior of those companies and their leaders. This course therefore explores the ethical challenges for commerce in biosciences industry as it will be increasingly important for leaders to consider the ethical ramifications of their work. The class will focus more on the practical application of ethical principles through real-world case studies, rather than emphasizing theories.

PDEV 5300

Business/Science Communications

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

n this course we will study and practice the fundamentals of expository writing and the expository essay and its application to students of the Life Sciences. Additionally, we will review the basics of academic research and documentation through a series of reading, writing and research assignments.

PDEV 5400

Premedicine Professional Development

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: All Terms

Pre-requisites: Pre-req: PPC or PPA program students only. MS-PHT Track students can also register if they meet the following pre-reqs:
a. Instructor's permission.
b. Available to domestic students only.
c. Completion of medical school or PA pre-req courses
d. A cumulative and/or science GPA of 3.0 or higher.
e. Demonstrated clinical and/or volunteer experience.

This course incorporates psychology with traditional premed professional development to offer students the most well-rounded preparation for medical school.

PDEV 6000

Team Masters Project

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: Pre-req: Enrollment as 2nd year MBS , 1st year MEng of approval of instructor. Undergraduate students may apply to participate in lieu of performing a senior thesis but approval by their undergraduate institution is required.

The Team Master's Project (TMP) is the capstone activity for Master of Business and Science (MBS) students and for first-year MEng students. A passing grade in two semesters is required for graduation with an MBS or MEng degree.

PDEV 6010

Team Master's Project Management

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: Co-Enrollment in PDEV 6000 Team Masters Project.

The Team Master's Project (TMP) is the capstone activity for Master of Business and Science (MBS) students and for first-year MEng students. A passing grade in two semesters is required for graduation with an MBS or MEng degree.

PDEV 6020

Team Masters Project

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: Enrollment as 2nd year MBS , 1st year MEng of approval of instructor. Undergraduate students may apply to participate in lieu of performing a senior thesis but approval by their undergraduate institution is required.

The Team Master's Project (TMP) is the capstone activity for Master of Business and Science (MBS) students and for first-year MEng students. A passing grade in two semesters is required for graduation with an MBS or Meng degree.(ALS/MEB 400)

PDEV 7200

Current Topics in Applied Life Sciences & Ethics, and Responsible Conduct of Research

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: All Terms

Pre-requisites: Pre-req: PhD program students only

This course has two objectives. One objective is to provide students with the opportunity to learn about various topics in applied life sciences by attending research talks at KGI. Students will be involved in the planning and coordination of these talks to ensure they are relevant to their PhD research. Another objective of this course is to engage researchers in reading about, considering, and discussing the responsible conduct of science. Ph.D. students are required to take the online ethics course as one of the requirements to pass the courses described under KGIs Office of Research and Sponsored Projects. Topics include data acquisition and management, mentoring and collaboration, collaboration between Academia and private industry, authorship, publication and peer review, misconduct in research, conflicts of Interest and scientific objectivity, animal and human subjects, and whistleblowing. This course helps to ensure that NIH and NSF requirements are met for training in the responsible conduct of research.

PHAR 5310

Pharmaceutics and Biopharmaceutics

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

A study of the application of physical and chemical principles to the development, preparation, and stabilization of pharmaceutical dosage forms. Also includes a study of biological and physicochemical factors that influence the availability of a drug from a dosage form and the subsequent disposition and response of the drug in the body.

PHAR 5311

Pharmaceutical Calculations

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This course covers all aspects of pharmaceutical calculations including: fundamentals of measurement and calculation, measurement systems, dosage and concentration units, isotonic solutions, electrolyte solutions, and calculations related to compounding.

PHAR 5315

Principles of Drug Action

School: School of Pharmacy

Course Credit: 4.5

Terms Offered: Fall Terms

Pre-requisites: N/A

This course is a study of structural features of drugs, functional group properties and pharmacokinetic and receptor interactions, fundamentals of pattern recognition that relate chemical structure to pharmacological action, the composition and structure of proteins, classification of enzymes and coenzymes, enzyme kinetics and regulation, drug biotransformation, principles of pharmacology and receptors including drug receptor properties, drug dose response curves, mechanisms of signal transduction, and common receptor subtypes. This course reviews principles of neurobiology and pharmacology as applied to the autonomic and somatic nervous systems. A study of the basic principles of drug action is presented for specific drug classes including: mechanisms of drug action, and routes of administration, clinical uses, disposition, contraindications, adverse reactions, clinically significant drug interactions, and drug disease interaction. The basic concepts of toxicology and adverse drug reactions are also introduced.

PHAR 5318

Pharmacokinetics

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

The application of the concepts of biopharmaceutics and pharmacokinetics to the processes of absorption, distribution, metabolism and excretion of drugs are discussed with the purpose of assessing drug dosage forms/regimens and improving the therapeutic management of patients. Additionally, the relationship between physiology, pharmacokinetics, pharmacodynamics and disease state is presented to help explain clinical variability to drug response.

PHAR 5321

Pharmacy Law & Ethics

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course examines State of California and Federal legal requirements associated with pharmacy practice and operations including regulation of pharmacy personnel, pharmacies, pharmacy departments, controlled substances, dispensing functions, and prospective drug review and counseling. Case-studies will allow students to make decisions based upon legal and/or ethical reasoning. By using the Self-

Assessment form for community/hospital outpatient pharmacies in conjunction with the course, the student will be familiar with materials on the California Pharmacy Jurisprudence examination (commonly abbreviated as the CPJE). CPJE is a standard examination created by the California State Board of Pharmacy to examine an individuals competency and knowledge so that he or she may be given a license to practice pharmacy in the State of California. The CPJE tests knowledge of pharmacy law, both state and federal. It is a prerequisite to obtaining a pharmacy licensure in California.

PHAR 5325

Integrated Series 1 - Introduction to Pharmacy Practice

School: School of Pharmacy

Course Credit: 5.0

Terms Offered: Fall Terms

Pre-requisites: N/A

An integrated study of anatomy, physiology, pathophysiology, (biochemistry, immunology, medical microbiology, if applicable in course) patient assessment, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, toxicology, patient care, alternative/complementary therapies, This course provides students with skills relating to patient-centered communication, medication adherence, patient evaluation and triage, pharmacologic and nonpharmacologic self-care treatment selection and counseling, patient education, and point-of-care testing. Communication skills will focus on professional interpersonal verbal and nonverbal communication strategies, cultural competence, patient interviewing and counseling, handling difficult situations, and motivational interviewing. Students will be introduced to basic medical terminology and introductory characteristics of the first half of the Top 300 Drugs through self-study. Skills and knowledge acquired in this course will be reinforced, applied, and assessed in the correlating recitation series.

PHAR 5332

Biostatistics

School: School of Pharmacy

Course Credit: 2.5

Terms Offered: Fall Terms

Pre-requisites: N/A

This course provides a basic primer in the statistical methods commonly used in the biomedical sciences and the covers content necessary to facilitate interprofessional research collaborations. Topics covered include conventions of data reporting, descriptive statistics, probability, and univariate/multivaritiate hypothesis testing (including parametric and non-parametric designs). Students will learn how to select the correct statistical analysis for research scenarios, to conduct and report these analyses, and to evaluate the use of statistics in medical literature.

PHAR 5335

Integrated Series 2:: Endocrinolgy and Urology

School: School of Pharmacy

Course Credit: 5.0

Terms Offered: Spring Terms

Pre-requisites: N/A

An integrated study of physiology, pathophysiology, metabolism, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, patient assessment, patient care, medication use in special populations, and review of pertinent drug literature as they relate to endocrine, reproductive, and urinary systems.

PHAR 5342

Drug Information, Study Design, and Literature Evaluation

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Introduction to drug information begins by developing student proficiency in library skills for retrieval, analysis and application of primary, secondary and tertiary literature. Students will apply library and literature search skills to general drug information topics including: the approach to answering drug information questions, adverse drug event reporting, medication use evaluation and evidence-based medicine. Students will learn about clinical trial and real word study designs so they can understand the strengths and limitations to each design. Leveraging knowledge from PHAR 332 and combining drug information topics, study designs, students will be introduced to journal club, assess scientific literature and further be trained to critically evaluate the scientific literature so they can confidently present their review/findings in a professional clinical or academic setting.

PHAR 5350

PDS1: Professional Development 1

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

First in a series of professional development courses, students will be exposed to behaviors of professionalism and be able to work on their communication etiquette during their initial year in pharmacy school. The historical development of the pharmacy profession, various aspects of pharmacy, guidance on communicating with health care providers, building on skills to support their professional growth in the graduate setting will be discussed. Students will participate in Interprofessional Education (IPE) activities, such as problem-based learning (PBL) allowing students to develop self-directed, lifelong learning. These

collaborative exercises with the University of California Riverside (UCR) School of Medicine, Riverside Community College (RCC) School of Nursing, and other Interprofessional collaborators will help students develop verbal and writing skills to allow effective communications with health professionals.

PHAR 5351

PDS2: Professional Development 2

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Second in a series of professional development courses, students will learn skills to advance their professional growth including goal setting and professional development planning. Students will participate in Interprofessional Education (IPE) activities, such as problem-based learning (PBL) allowing students to develop self-directed, lifelong learning. These collaborative exercises with the University of California Riverside (UCR) School of Medicine, Riverside Community College (RCC) School of Nursing, and other Interprofessional collaborators will help students develop verbal and writing skills to allow effective communications with health professionals. Students will learn to work as a group, self-reflect, and incorporate these skills to document professional growth in their electronic portfolios.

PHAR 5360

Recitation 1

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This course is the first of six progressive courses in the recitation series. Each course in the recitation series corresponds with classes in the Integrated Series of This course is the first of six progressive courses in the recitation series. Each course in the recitation series corresponds with classes in the Integrated Series of the PharmD curriculum. Rather than delivering new didactic material, the recitation series facilitates learning through application of material covered in corresponding semester courses and builds upon material covered in previous courses.

PHAR 5365

Recitation 2

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Application of the integrated study of physiology, pathophysiology, metabolism, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, patient assessment, patient care, medication use in special populations, and review of pertinent drug literature as they relate to endocrine, reproductive, and urinary systems.

PHAR 5370

Introduction to the Industry

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course provides the student with an opportunity to observe the diverse roles pharmacists may pursue in the pharmaceutical industry. Students will participate in discussions about pharmacists in the following areas of practice: medical affairs leadership, medical liaisons, healthcare economics, medical communications, medical information, Commercial Sales, operations & informatics. Attention also will be given to areas such as manufacturing, government regulations and research, and their relevance to pharmaceutical sales and marketing. The student will gain an understanding of how previously listed roles contribute to pharmaceutical industry, patient care and members of the healthcare process such as hospitals, practitioners, managed care organizations, and insurers.

PHAR 5375

Pre-IPPE Readiness and Patient Assessment

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course brings together knowledge and skills obtained from first-year didactic courses and introduces essential aspects of pharmacy practice to prepare students for Introductory Pharmacy Practice Experience (IPPE) courses and health promotion, disease prevention and patient assessment activities. The focus of this course is preparation for introductory pharmacy practice in community, ambulatory, and health system settings. Patient assessment, physical exam, tobacco cessation training and point-of-care testing skills are major components of this course. Elements of population and public health will be introduced and applied to these practice settings.

PHAR 6411

Sterile Products

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course introduces concepts and properties of sterile products including application of aseptic techniques and laminar flow theory in the preparation of sterile products such as total parenteral nutrition and chemotherapy preparations. Emphasis will be placed on quality assurance programs, sterile dosage forms, and parenteral calculations.

PHAR 6417

IPPE 1 Community Pharmacy Practice

School: School of Pharmacy

Course Credit: 4.5

Terms Offered: N/A

Pre-requisites: N/A

This course introduces the student to the practice of community pharmacy and provides each student with the opportunity to explore the role of the pharmacist. Orientation to pharmacy practice includes patient and healthcare provide interactions, medication processing systems, and learning healthcare provider roles.

PHAR 6420

Pharmacy Management

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This course gives the future pharmacy practitioner a basic understanding of sound management principles and skills for the operation of any pharmacy. In addition, the effect of the rapidly changing healthcare environment on pharmacy practice and the impact of pharmacy on the health care system are explored. Also included are concepts related to purchasing and operating a pharmacy practice and people management skills along with an analysis and description of management principles and processes from the classical and behavioral points of view. Topics include job satisfaction, turnover, productivity, motivation, job design, staffing, performance appraisal, leadership and communication.

PHAR 6421

Pharmacoeconomics and Pharmacovigilance

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course will introduce basic concepts of pharmacovigilance, health outcomes, and health economics (pharmacoeconomics). Health Economics and Outcomes Research (HEOR) is becoming increasingly critical in the pharmacy profession. This is partly due to the healthcare system cost constraints and the increasing number of new and often expensive therapies coming to market thus, additional evidence, beyond clinical trial data, is required to demonstrate the value of a therapy and its potential in clinical practice. To ensure successful reimbursement (i.e. funding) and subsequent uptake of a therapy, it is critical to generate and communicate evidence that demonstrates the added value of a therapy compared with available alternatives to relevant stakeholders, such as payers and healthcare professionals. Students will have the opportunity to evaluate the three components of HEOR (economic, humanistic, and clinical) and understand how these components are used in healthcare decision-making and clinical application. Students will learn to critically evaluate the pharmacoeconomic (PEC) /health outcomes literature and to assess/communicate the risks/benefits of marketed drugs through the introduction of pharmacovigilance.

PHAR 6425

Integrated Series 3 - Cardiology

School: School of Pharmacy

Course Credit: 6.5

Terms Offered: Fall Terms

Pre-requisites: N/A

An integrated study of anatomy, physiology, pathophysiology, (biochemistry, immunology, medical microbiology, if applicable in course) patient assessment, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, toxicology, patient care, alternative/complementary therapies, pharmacoeconomic issues, medication use in special populations, and review of pertinent drug literature as they relate to the cardiovascular system.

PHAR 6428

Population Health

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This course presents and facilitates the analysis of major health service delivery and management issues

in the United States (US). The course presents a systematic analysis of the administrative structure, financing, and provision of health care services in the US. This course will expand student understanding of health, illness and wellness by looking at these as both biological, socio-cultural and socio-economic phenomena. Important population differences rooted in cultural, racial, ethnic, social, behavioral, economic and political factors will be examined to encourage innovative community and patient-directed solutions that consider the unique characteristics and structural challenges presented by the US health care system. Applications of public and population health are especially emphasized. Students will evaluate social determinants of health and a wide range of other health-related indicators within communities, diagnose areas of need and suggest focused population-based solutions.

PHAR 6430

Intro to Pharmacy Informatics

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This introductory course in pharmacy informatics focuses on medication therapy related knowledge, applications and data within health care systems. Informatics consists of the acquisition, storage, analysis, use and dissemination of data to help provide safe, evidenced-based patient care. Historical as well as prospective development, application and implementation of technology for pharmacists and pharmacy technicians to support and streamline workflow will be highlighted with an emphasis upon best practices and systems to increase efficiency across the medication use process and improve patient safety.

PHAR 6435

Integrated Series - Nephrology

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

An integrated study of physiology, pathophysiology, metabolism, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, patient assessment, patient care, medication use in special populations, and review of pertinent drug literature as they relate to fluid and electrolyte homeostasis, and the renal system.

PHAR 6445

Integrated Series 5 - Immunology, Rheumatology, and Dermatology

School: School of Pharmacy

Course Credit: 4.0

Terms Offered: Spring Terms

Pre-requisites: N/A

An integrated study of anatomy, physiology, pathophysiology, (biochemistry, immunology, medical microbiology, if applicable in course) patient assessment, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, toxicology, patient care, alternative/complementary therapies, pharmacoeconomic issues, medication use in special populations, and review of pertinent drug literature as they relate to dermatology, rheumatology, and immunology.

PHAR 6450

PDS3: Professional Development 3

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Third in a series of professional development courses, students will learn skills and use tools to advance their professional growth. Students will update their curriculum vitae, Career Plan using SMART Goals, and participate in a community service activity. Students will be introduced to postgraduate programs and board certifications, discuss short term and long term professional goals, and provide reflections on the impact of their community service.

PHAR 6451

PDS4: Professional Development 4

School: School of Pharmacy

Course Credit: 1.0
Terms Offered: Spring Terms

Pre-requisites: N/A

Fourth in a series of professional development courses, students will learn skills to advance their professional growth and prepare them for career opportunities. Students will update their professional goals, curriculum vitae, and electronic portfolios. Students will complete a professional development plan and participate in multiple writing workshops.

PHAR 6455

Integrated Series 6 - Infectious Disease

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Review of medical microbiology and the basic principles of antibiotic action including, for each specific antibiotic class, the mechanism of action, routes of administration, disposition, contraindications, adverse reactions, and clinically relevant drug interactions. Principles of antimicrobial regimen selection, susceptibility testing and trends in resistance will be discussed. Also included is an integrated study of anatomy, pathophysiology, physical assessment, pharmacology, therapeutics, clinical pharmacokinetics, patient care, alternative/complementary therapies, pharmacoeconomic issues, medication use in special populations, and review of pertinent drug literature as they relate to major bacterial infectious diseases.

PHAR 6460

Recitation 3

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Application of the integrated study of physiology, pathophysiology, metabolism, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, patient assessment, patient care, medication use in special populations, and review of pertinent drug literature as they relate to the cardiovascular and renal systems. Material and topics from previous courses in the Doctor of Pharmacy curriculum will be reinforced.

PHAR 6465

Recitation 4

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Application of the integrated study of physiology, pathophysiology, metabolism, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, patient assessment, patient care, medication use in special populations, and review of pertinent drug literature as they relate to the fields of immunology, rheumatology, dermatology, and infectious diseases. Material and topics from previous courses in the Doctor of Pharmacy curriculum will be reinforced. Application of the integrated study of physiology, pathophysiology, metabolism, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, patient assessment, patient care, medication use in special populations, and review of pertinent drug literature as they relate to the fields of immunology, rheumatology, dermatology, and infectious diseases. Material and topics from previous courses in the Doctor of Pharmacy curriculum will be reinforced.

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PHAR 6471

IPPE 1 - Community Pharmacy Practice

School: School of Pharmacy

Course Credit: 4.5

Terms Offered: Fall Terms

Pre-requisites: N/A

This course introduces the student to the practice of community pharmacy and provides each student with the opportunity to explore the role of the pharmacist. Orientation to pharmacy practice includes patient and healthcare provider interactions, medication processing systems, and learning healthcare provider roles.

PHAR 6472

IPPE 2- Patient Communication in Senior Chronic Care

School: School of Pharmacy

Course Credit: 0.5

Terms Offered: Spring Terms

Pre-requisites: N/A

The Patient Communication in Senior Chronic Care IPPE is the second IPPE in the second professional year. This IPPE aims to build student awareness of the geriatric population, foster student communication skills, and write medication action plan and SOAP note.

PHAR 7513

Healthcare Finance and Reimbursement

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: N/A

The course provides an overview of the managerial aspects of health care finance and reimbursement systems. Finance topics to include preparation of budgets, financial statements, cost containment and management of health resources. Reimbursement topics include both public and private components of healthcare and pharmacy third-party-payer systems, evolving payment models, coding and billing of services; and the 340B drug-pricing program.

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PHAR 7514

Quality and Performance Improvement

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

The course is an introduction to principles of quality and performance improvement as they apply to healthcare organizations. The students will be able to describe the motivations and implications of shifting the organizational focus towards patient quality improvement, as well as the importance of meeting quality metrics to organizational performance. Contemporary quality and performance improvement practices within healthcare to be reviewed include lean management principles.

PHAR 7515

Integrated Series 7 - Neurology and Psychiatry

School: School of Pharmacy

Course Credit: 7.0

Terms Offered: N/A

Pre-requisites: N/A

An integrated study of anatomy, pathophysiology, physical/psychiatric/neurologic assessment, pharmacology, therapeutics, clinical pharmacokinetics, patient care, alternative/complementary therapies, pharmacoeconomic issues, medication use in special populations, and review of pertinent drug literature as they relate to psychiatric and neurologic disorders and the nervous system.

PHAR 7520

Pharmaceutical Marketing

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: N/A

Students will be introduced to pharmaceutical marketing as a functional area of the business enterprise. Students will explore the analytical and managerial approach to problem-solving in market research, marketing, market access, pricing and distribution with products, services and ideals in the domestic and international marketplace. Students will develop a marketing toolkit for designing pathways to various marketing opportunities. A marketplace simulation will be utilized to reinforce the critical marketplace principles.

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PHAR 7525

Integrated Series 8 - Gastroenterology

School: School of Pharmacy

Course Credit: 4.0

Terms Offered: Fall Terms

Pre-requisites: N/A

An integrated study of anatomy, pathophysiology, physical assessment, pharmacology, therapeutics, clinical pharmacokinetics, patient care, alternative/complementary therapies, pharmacoeconomic issues, medication use in special populations, and review of pertinent drug literature as they relate to the digestive system and nutrition therapy. In addition, optimal nutrition for healthy adults and children will be reviewed.

PHAR 7536

Integrated Series 9 - Hematology, Oncology, Pulmonology & Ophthalmology

School: School of Pharmacy

Course Credit: 5.0

Terms Offered: Spring Terms

Pre-requisites: N/A

An integrated study of anatomy, pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetics, medication therapy management, therapeutics, alternative/complementary therapies, pharmacoeconomic issues, and symptom management pertaining to hematology, oncology, pulmonology, and ophthalmology pharmacy practice

PHAR 7541

Clinical Decision Support Systems

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

This elective course within the Pharmacy Informatics certificate program will focus on clinical decision support (CDS) concepts and application of these concepts in electronic medical records and automation technology. CDS provides clinicians, staff, patients or other individuals with knowledge and person-specific information, intelligently filtered or presented at appropriate times, to enhance health and health care. CDS encompasses a variety of tools to enhance decision-making in the clinical workflow. Inputs from published best practices, and facility specific data mining and outcomes analysis will be considered.

Strategies to minimize alert fatigue will be explored. Examples include computerized alerts and reminders to care providers and patients, clinical guidelines, evidence-based, condition-specific order sets and ordering pathways, focused patient data reports and summaries, documentation templates, diagnostic support, and contextually relevant reference information.

PHAR 7542

Applying Technology to the Medication Use Process

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Technology and health information management play a crucial role in the safe medication use process. Different technologies including both hardware and software dictate how practitioners and consumers manage medication therapy and health information. Technology related factors such as understanding clinical complexity for medication system design, big data analytics, current EHRs, precision medicine, health IT safety issues, and potential solutions influence the medication management and patient safety risks. Therefore, understanding the problems and potential gaps in medication use processes and finding potential solutions can equip future pharmacists the knowledge and background to influence pharmacy practice positively.

PHAR 7543

Planning, Implementing and Optimizing Systems

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Computer systems and applications in healthcare have a life cycle that begins with identification of an idea or need, requests for proposals, selection, planning, implementation, optimization, maintenance, support and eventually, replacement or decommissioning. Different stages of system implementation require a detailed understanding of how system engineering operates within the health care arena. For example, understanding project planning and management, design level approaches, design that supports patient safety management, development, implementation, operational support, and learning about different management strategies can help. Tools such as Failure Mode Effects Analysis can be used to anticipate failure points and to put appropriate measures into place to reduce or eliminate the potential for error. Six Sigma tools can also be used to increase efficiency and reduce waste. Project management skills are mandatory to ensure the new information technology or automation system is implemented on time and within budget. The student pharmacist will gain a basic understanding of value statements, finance, and return on investment in order to gain project approval from the executive suite. Also, the student will learn to create and analyze report using Structured Query Language (SQL).

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PHAR 7545

Achieving Medication Safety Through Informatics

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

This course allows a student to analyze, consider perspectives and create an approach to leading the advancement of technology and automation systems throughout the medication use process. Medication safety is a growing focus of healthcare providers, institutions, payers, and patients. Medications represent the largest portion of errors reported in the healthcare literature and as such, deserve the attention of healthcare providers. Much of the focus of medication safety efforts is to leverage HIT tools to improve the safety of the medication use process. This course will introduce the principles of root cause analyses, failure mode effect analysis (FMEA) and Medication Error Reduction Plans (MERPs) as they relate to the technology and automation applied to medication use processes. The student will, as a result, be able to identify the advantages and disadvantages associated with various types of HIT, and identify opportunities for improvement while understanding the limitations these clinical systems have with respect to medication safety.

PHAR 7546

Healthcare Delivery Science and Medication Safety

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

This course provides an advanced study of how care is actually delivered within healthcare systems and the community, with a specific interest in identifying and correcting for common or serious problems. A focus on medication-related safety and quality metrics will help students to develop the analytical skills needed to identify specific factors that lead to suboptimal events and outcomes. Students will learn about technologies that health professionals use to detect medication errors, as well as those tools available to patients to use in their own self-care. Course topics include an overview of quality and safety issues in healthcare, common types of medication use problems, human factors, engagement and leadership of quality teams, quality improvement tools and techniques such as checklists, root cause analysis and failure mode and effects analysis, LEAN, Joint Commission, Institute for Safe Medication Practices and other consensus guidelines, and medication error reduction programs. Students will learn about current and evolving health information technology methods and tools that work to improve the safety of medication use processes.

PHAR 7552

Pre-APPE Readiness 1

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This Pre-APPE Readiness course is the first of a two-course series that brings together all of the previous knowledge and skills obtained from both the didactic and experiential curricula. The focus of this course is on patient care in inpatient, community, and ambulatory clinic settings and critically assessing evidence to support informed decisions. Exercises utilize patient cases that use Problem-Based Learning techniques to draw upon previously learned as well as new knowledge in advancing discussion. Group and individual active learning, discussions, mini-lectures, and Q&A will revolve around the changing/evolving patient. Review activities prepare the student for Advanced Pharmacy Practice Experiences and entrance into the profession.

PHAR 7553

Pre-APPE Readiness 2

School: School of Pharmacy

Course Credit: 2.0

Terms Offered: Spring Terms

Pre-requisites: N/A

This Pre-APPE Readiness course is the second of a two-course series that brings together all of the previous knowledge and skills obtained from both the didactic and experiential curricula. The focus of this course is on patient care in inpatient, community, and ambulatory clinic settings and critically assessing evidence to support informed decisions. Exercises utilize patient cases that use Problem-Based Learning techniques to draw upon previously learned as well as new knowledge in advancing discussion. Group and individual active learning, discussions, lectures, interprofessional education (IPE) case studies, and Q&A will revolve around the changing/evolving patient. Review activities prepare the student for Advanced Pharmacy Practice Experiences and entrance into the profession.

PHAR 7555

Integrated Series 10 - Pulmonology and Ophthalmology

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

An integrated study of anatomy, pathophysiology, pharmacology, medicinal chemistry, clinical pharmacokinetics, medication therapy management, therapeutics, alternative/complementary therapies, pharmacoeconomic issues, and symptom management pertaining to pulmonology and ophthalmology pharmacy practice.

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PHAR 7560

Recitation 5

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Fall Terms

Pre-requisites: N/A

Application of the integrated study of physiology, pathophysiology, metabolism, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, patient assessment, patient care, medication use in special populations, and review of pertinent drug literature as they relate to the fields of immunology, rheumatology, dermatology, and infectious diseases. Material and topics from previous courses in the Doctor of Pharmacy curriculum will be reinforced.

PHAR 7563

Fundamentals of Medical Affairs

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

Students will be introduced to Medical Affairs as a functional area of the medical products business enterprise. Students will explore strategic, analytical and managerial approaches to problem solving in Medical Affairs. This will include in-depth discussion of the linkage between clinical trials, health economics & outcomes research to generate evidence, publication planning, medical information, communication, regulatory affairs, pharmacovigilance, and legal/compliance. Students will apply their learnings of a Medical Affairs in a narrative, create and present a plan for a product launch. This course will help students understand all the nuances/teams within Medical Affairs and external to Medical Affairs related to the launch or maintenance of any medical product.

PHAR 7565

Recitation 6

School: School of Pharmacy

Course Credit: 1.0

Terms Offered: Spring Terms

Pre-requisites: N/A

Application of the integrated study of physiology, pathophysiology, metabolism, pharmacology, medicinal chemistry, therapeutics, clinical pharmacokinetics, pharmacogenomics, patient assessment, patient care,

medication use in special populations, and review of pertinent drug literature as they relate to the fields of hematology, oncology, pulmonology, and ophthalmology. Material and topics from previous courses in the Doctor of Pharmacy curriculum will be reinforced.

PHAR 7571

IPPE 3 Health Systems Pharmacy Practice

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This required course introduces students to the acute care setting of the hospital pharmacy. Opportunities for health systems management including informatics, leadership, and process are part of the curriculum of this course. Emphasis is placed on professionalism, communication, patient consultation, patient information gathering, self-care, drug information, and disease state management to prepare students for advanced pharmacy practice experience (APPE). This course is taken in the summer or fall of the P-3 Year.

PHAR 7572

Medication Therapy Outcomes Certificate Elective Experience

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: N/A

Pharmacists need to have specialized skills in chronic disease areas or practice settings to provide optimal patient-centered care. Skills in providing medication therapy review and patient education and consultation, developing practice-related business models or inter-professional approaches, and utilizing evidence-based medicine and safe use of healthcare products are needed to provide optimal pharmacotherapy outcomes. Additionally, graduates need to have in-depth understanding of population-based or specialty area of practice and the regulatory and safety issues associated with these various practice settings.

PHAR 7573

Healthcare Management Certificate Elective Experience

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: N/A

The Health Care Management Elective IPPE offers pharmacy students valuable management training and experience in dynamic healthcare settings. The curriculum emphasizes analytical and problem solving skills in conjunction with a deep understanding of the healthcare environment.

PHAR 7575

Pharmacy Informatics Certificate Experience Elective

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: N/A

The Health Informatics Elective IPPE will introduce students to the key principles utilized in hospitals, health systems or industry to improve data base management, automation, and electronic prescribing and health records. The elective course is used to develop the student's knowledge and skills with informatics concepts in pharmacy practice, so that these concepts can be applied to any setting to improve the patient care outcomes.

PHAR 7576

Medical and Clinical Affairs Certificate Experience Elective

School: School of Pharmacy

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: N/A

The course provides an opportunity for students to develop skills related to professional roles and responsibilities of pharmacists within clinical trials, regulatory, and medical affairs practice domains. Practice experiences include processes of drug discovery, development, clinical trial design, including trial protocol development and execution, and assessment of safety and efficacy. This course also provides an exposure to key medical affairs functions, including medical information, medical communications, departmental management, health economics and outcomes research, field medical affairs roles such as the medical science liaison and commercialization.

PHAR 7581

Advanced Topics in Drug Interactions

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

This course will provide methods for recognizing and acting upon significant drug interactions. Appropriate consultation techniques for making recommendations to providers and patients on clinically significant drug interactions will be covered. Overall goal of this course is to improve knowledge and skills that will enable the student to prevent, predict, evaluate, and manage drug interactions in an evidence-based, patient-specific manner.

PHAR 7582

Critical Care

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: N/A

The critical care elective course is designed to expose students to the complex pathophysiology and clinical presentation of common diseases, pharmacotherapy, and decision-making processes for the treatment of patients who are critically ill. Students will learn treatment principles of commonly encountered disorders in critically ill patients. With integration of pathophysiology and therapeutics of various critical care disease states, students will acquire knowledge necessary to apply critical care pharmacotherapeutic management, with an emphasis on the role of pharmacists in initiating, monitoring, and altering drug therapy to achieve optimal clinical outcomes.

PHAR 7587

Nutrition Support

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

Nutrition support is a standard component of patient care in both inpatient and ambulatory care settings. Many hospitals and outpatient home infusion centers empower collaboration between pharmacists, dieticians, and other healthcare providers to manage enteral and parenteral nutrition regimens. This course builds upon concepts introduced in PTMM and will provide an overview of nutrition support therapy, including both enteral and parenteral nutrition, with an emphasis on specialized patient populations. The goal of this course is to provide student pharmacists with the skills necessary to manage enteral and parenteral nutrition regimens in clinical practice.

PHAR 7588

Geriatric Patient Care

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: N/A

This course approaches geriatrics from a holistic systems perspective. The current delivery system is segmented, making it difficult for older patients to receive comprehensive care. Incorporating geriatric principles from multiple disciplines, this course is designed to prepare future pharmacists to serve as accessible and knowledgeable healthcare providers, able to help older patients, and their caretakers, navigate through a complex healthcare system. The course will be taught from the perspective of a pharmacist facilitating continuity of care and will include topics such as economics, socialization, cultural competence, caregiver support, housing, potential abuse, supportive care, mental health, dental, preventative care, and healthcare benefits.

PHAR 7589

Oncology & Palliative Care

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: N/A

An overview of cancer therapy, supportive care, and the role of a pharmacist in the delivery of cancer care in both inpatient and ambulatory care settings, an overview of palliative medicine and end of life care, with an emphasis of pharmaceutical care in these settings.

PHAR 7593

Cardiology

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: N/A

This elective course builds upon concepts introduced in Pharmacotherapy and Medication Management to provide students with an in-depth review and expansion of knowledge regarding the management of cardiovascular pharmacotherapy. The class is focused on evaluating scientific literature in the area of cardiology and applying knowledge gained from clinical trials to approaches in patient care. The course will present new and emerging data, exploring clinical trials that may impact standard of care. Students will have an opportunity to discuss how clinical trials are used in the development of national practice guidelines as well as compare and contrast different guidelines and their approaches to the treatment of cardiovascular diseases. Students will engage in discussions on topics where controversies exist amongst experts and explore clinical trial data that seem contradictory. Learning techniques include class

discussion, formulation of a comprehensive medication management plan for patient cases, evaluation of primary literature, and student presentations.

PHAR 7595

Neuropsychiatric Pharmacotherapy

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: N/A

The use of pharmacotherapy to treat psychiatric and neurological disorders has become an increasingly broad and complex part of health care. The complexity of the brain and behavior yield highly specialized areas of study that are then utilized to develop effective pharmacotherapeutic interventions. Knowledge of the treatment of diseases of the brain and behavior is critical to those treating other disease states due to the impact these disorders and medications can have on overall health. Neuropsychiatric pharmacotherapy covers important topics in the treatment of psychiatric and neurologic disorders such as schizophrenia, bipolar disorder, major depressive disorder, anxiety disorders, childhood psychiatric disorders, sleep disorders, substance use disorders, dementia and other special topics in the specialty of neuropsychopharmacology. This course is an elective designed to cover core clinical sciences beyond the general therapeutics modules on neuropsychiatric topics and will expand on the teaching covered in the core clinical science course.

PHAR 8600

Advanced Community Practice APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The Community Pharmacy Practice Advanced Pharmacy Practice Experience (APPE) is one of the required core courses out of the seven APPEs in the fourth professional (P-4) year. The primary goal of this core Community Pharmacy Practice APPE is to provide students with the opportunity to learn how to provide safe, efficacious and economical patient-centered care by identifying, solving and preventing medication-related problems in the community pharmacy setting. Emphasis will be placed on the student's ability to demonstrate their understanding of common disease states and treatment modalities as well as their ability to provide pharmaceutical care and disease state management initiatives.

PHAR 8601

Advanced Health-System Practice APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The Health-System Pharmacy Practice Advanced Pharmacy Practice Experience (APPE) is one of the required core courses out of the seven APPEs in the fourth professional (P-4) year. This required 6-week Advanced Pharmacy Practice Experiences provides students with practical experience in the health-system care setting. They include all aspects of institutional practice operations including medication distribution, patient assessment and monitoring, pharmacotherapy assessment, medication control and procurement, medication use systems, drug information services and administrative functions.

PHAR 8602

Ambulatory Care APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The Ambulatory Care Advanced Pharmacy Practice Experience (APPE) is one of the required core courses out of the seven APPEs in the fourth professional (P-4) year. This advanced practice experience provides students with practical experience in the setting of ambulatory care. The sites available are varied. This experience introduces the student to the practical application of patient-centered care, enhances student abilities to identify and resolve medication related problems, refines medication information skills and provides an opportunity for the student to participate in multidisciplinary patient care in an ambulatory care setting to optimize pharmacotherapy.

PHAR 8603

General Medicine APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The General Medicine Advanced Pharmacy Practice Experience (APPE) is one of the required core courses out of the seven APPEs in the fourth professional (P-4) year. This advanced practice experience provides students with practical experience in the setting of General Medicine. The sites available are varied. This experience introduces the student to the practical application of patient-centered care, enhances student abilities to identify and resolve medication related problems, refines medication information skills and provides an opportunity for the student to participate in multidisciplinary patient care in a General Medicine setting to optimize pharmacotherapy.

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PHAR 8610

Direct Patient Care APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: N/A

The Direct Patient Care Advanced Pharmacy Practice Experience (APPE) is one of the required core courses out of the seven APPEs in the fourth professional (P-4) year. This 6-week Advanced Pharmacy Practice Experience course is designed to further develop the student's knowledge and skills utilized in both traditional and non-traditional pharmacy settings.

PHAR 8611

Indirect Patient Care APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

The Indirect Patient Care APPE is an elective APPE in the fourth professional (P-4) year. The primary goal of this Advanced Pharmacy Practice Experience (APPE) is to provide distinctive options for students to participate in areas such as compounding, nuclear pharmacy, academia, research, consulting, industry and other environments, direct patient care is not the primary focus. Specialty areas will vary according to the preceptor and site availability. Students will apply knowledge, skills, and abilities developed throughout the curriculum to course and site-specific objectives and will demonstrate effective verbal and written communication skills in fulfillment of their responsibilities.

PHAR 8620

Cardiology APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

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PHAR 8621

Continuum of Care APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8622

Coumadin Clinic APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8623

Critical Care APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting

PHAR 8624

Emergency Medicine APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8625

Geriatrics APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8626

Infectious Disease/HIV APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8627

Oncology APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

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PHAR 8628

Pediatrics APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8629

Psychiatry APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8630

Specialty APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8640

Pharmacy Capstone Seminar

School: School of Pharmacy

Course Credit: 1.5

Terms Offered: Spring Terms

Pre-requisites: N/A

This is a year-long capstone that brings together previous knowledge and skills from both the didactic and experiential curricula. The focus of this course is on disease state review and activities with the purpose of guiding the student's preparation for entrance into the profession.

PHAR 8650

Drug Information and Education APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8651

Research APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8652

Healthcare Policy & Regulatory APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

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PHAR 8653

Home Infusion APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8654

Managed Care APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8655

Medication Safety APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8672

Medication Therapy Outcomes APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8673

Healthcare Management Health Systems APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8674

Medical and Clinical Affairs APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

PHAR 8675

Pharmacy Informatics APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

Advanced Pharmacy Practice Education - courses that are designated experiential and will take place off campus in a variety of pharmacy practice setting.

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PHAR 8690

Independent Study APPE

School: School of Pharmacy

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: All Didactic Course Work

The Research-Independent Study is a required 6-week Advanced Pharmacy Practice Experience (APPE) in the fourth professional year. This APPE provides students with the opportunity to pursue a research or independent study experience that culminates with completion of an individualized project deliverable. Students will apply knowledge, skills, and abilities developed throughout the pharmacy curriculum to individualized course or site-specific objectives. Students will demonstrate effective verbal and written communication skills in fulfillment of their responsibilities. Project experiences can range from a variety of topics related to the practice of pharmacy or pharmaceutical therapy, including original research, reviews, monographs, continuing educations, or scholarship of teaching and learning. Each research project or independent experience is guided by a KGI-affiliated faculty member. Some research projects may be conducted in collaboration with more than one APPE student, provided that each individual student can demonstrate a clear and substantial contribution to the overall project.

REG 5000

Introduction to US Food and Drug Law

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: All Terms

Pre-requisites: N/A

This course is designed to provide a broad overview of the United States regulatory system, with some European Union structure and regulation highlights. Students will gain a basic understanding of how the FDA regulates the approval of various products and how this has changed over time, as well as the necessary inputs companies must be aware of when applying for regulatory approvals in the USA.

REG 5310

Biopharmaceutical Quality Assurance and Control

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: Pre-req: ENG 5100 or ENG 5160

This course will provide an introduction to the concepts and requirements for global pharmaceutical quality compliance. The course will address current Good manufacturing practices (cGMP): Quality considerations for Biosimilars, Stability of Biotechnology products, FDA inspection processes and other quality aspects associated with the manufacture of Biopharmaceuticals. This course provides a foundational knowledge for ensuring product quality.

REG 6110

Drug and Biologic Regulations

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Pre-req: REG 5000

Drug and Biological medical products are among the most profitable, yet most demanding to commercialize, requiring the major regulatory oversight. This course will provide students with an in-depth understanding of relationships between scientific discovery, testing and regulatory oversight of drug and biological medical products. It will look at the practical issues and rules governing prescription and over-the-counter drugs, and look at the changes that being introduced by genetic engineering, generic and biological product development. This course will consider the issues facing regulatory specialists as they work with the FDA and other international regulatory bodies to secure and maintain product approval.

REG 6120

Medical Device Regulations

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Pre-req: REG 5000

This course examines the operational, strategic and commercial aspects of the regulatory approval process for new medical devices, diagnostics, and combination products in the United States. The topics are designed to provide a chronological overview of the requirements needed to seek marketing approval. The goal of this course is to introduce and familiarize students with the terminology, timelines and actual steps followed by Regulatory Affairs professionals employed in the medical device, pharmaceutical, or biotechnology industry. Case studies from industry will be examined to supplement certain topics and to illustrate interpretation of the regulations.

REG 6140

Global Regulatory Pathways for Drugs and Biologics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: Pre-req: REG 5000

This course provides a comprehensive overview of regulatory requirements and pathways for the development, approval, and commercialization of drugs and biologics (including biosimilars) outside the United States. The focus will be on key global markets including the European Union, India, Japan, and the broader Asia-Pacific region. Students will explore region-specific regulatory frameworks such as the European Medicines Agency (EMA) centralized procedure, India's CDSCO processes, Japan's PMDA review system, and regulatory trends in countries such as the China NMPA, South Korea MFDS, and Australia TGA. The course will examine critical topics such as clinical trial authorization, marketing application requirements, quality and manufacturing compliance, pharmacovigilance obligations, and so-called reliance pathways to speed market access and reduce duplication of effort. Global concurrent regulatory submissions are now no longer just a want, but an imperative business need. Emphasis will be placed on strategic considerations for global development programs, including multi-regional clinical trials, harmonization efforts through ICH guidelines and differences that can impact timelines, costs, and market access. Designed for students and professionals entering regulatory affairs or global drug development, this course equips learners with the foundational knowledge to navigate and manage regulatory activities in major ex-U.S. jurisdictions.

REG 6310

Advanced Quality Topics for Biologics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: Pre-req: REG 5310

Regulatory Chemistry, Manufacturing and Control (CMC) requirements determine the strategy parameters for new pharmaceutical process development and changes post approval. Knowledge of CMC requirements and relevant agencies is a key success factor in pharmaceutical approval and compliance. In particular, globalization has caused a significantly more complex regulatory environment for the manufacture and distribution of pharmaceuticals (and medical devices). Most product supply chains are now multinational with increasing trends towards investment in rapidly developing but poorly regulated nations. The development of regulatory strategies for product development and post approval changes requires the understanding of many national regulatory agencies and international harmonization efforts. The advent of Biosimilars will place increased emphasis on CMC product characterization and process comparability and/or interchangeability as the key criteria for introduction of generic biologics.

REG 6320

Advanced Regulatory Topics for Biologics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: Pre-req: REG 5310

The innovation in the Biotechnological and Biologics fields is advancing at a rapid pace. It is expected that many novel therapies in the fields of Immuno-oncology, Gene Therapy, Rare disease therapies will be approved for the treatment of various diseases. Also, it is expected that many new Biosimilar products will be introduced to the marketplace. The Regulatory authorities are challenged to keep pace with the innovations and providence guidance documents to the industry. Persons knowledgeable in the emerging therapies are in high demand and hold positions of significant responsibility within the private and public sectors of the healthcare industry. The primary goal of this course is to provide students with an advanced background in the regulatory and quality considerations of these emerging therapies. Through a series of lectures this course will teach the critical thinking and judgement skills that are needed for developing regulatory strategies for emerging therapies.

REG 6510

Design of Clinical Trials

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: N/A

This course will provide students with a more in-depth understanding of clinical trial design, conduct and strategy for therapeutic products. Clinical trial design elements will be examined in the context of their impact on clinical trial outcomes. Emphasis will be placed upon trial designs that reflect the biological nature and mechanism of action of the therapeutic product being tested, rather than a cookbook approach. Design elements related to small molecules, antibodies, therapeutic proteins, therapeutic vaccines, and cell and gene therapies will be discussed. Discussions will include operational issues impacting execution of clinical trials and why they are critical elements of successful clinical development programs. Students will gain an understanding of the principles for use of particular biostatical testing procedures and in what context certain methods should be used. There will be an emphasis on clinical development problem solving as students work on team projects and defend their own clinical development solutions in the context of product profiles, strategy and timelines.

REG 6520

Clinical Trial Design and Literature Evaluation

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MATH 5020

This course is a practical application of biostatistics in the context of designing clinical or research protocols and reading research literature.

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RES 6000

Independent Research

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: All Terms

Pre-requisites: Pre-req: Permission of Faculty

Independent research means work performed by students for credit on a project in the natural sciences, engineering, or social sciences aimed at generating new knowledge. For more information, please see the Independent Study Form on the KGI Registrar Webpage.

RES 6001

Independent Research

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: Pre-req: Permission of Faculty

Independent research means work performed by students for credit on a project in the natural sciences, engineering, or social sciences aimed at generating new knowledge. For more information, please see the Independent Study Form on the KGI Registrar webpage.

RES 6010

Independent Study

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: All Terms

Pre-requisites: Pre-req: Permission of faculty

Independent study involves review of existing knowledge or studying for a certification. For more information, please see our information page about Independent Study & Independent Research: https://www.kgi.edu/academics/academic-affairs/registrar/forms-and-documents/independent-study-research-contract/

RES 6011

Independent Study

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Terms

Pre-requisites: Pre-req: Permission of Faculty

Independent study involves review of existing knowledge or studying for a certification. For more information, please see our information page about Independent Study & Independent Research: https://www.kgi.edu/academics/academic-affairs/registrar/forms-and-documents/independent-study-research-contract/

RES 6200

Master Thesis (MS)

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: Pre-req: MS Thesis students only

This course is intended for second-year Master of Science in Applied Life Sciences students, who wish to conduct thorough primary or secondary research in areas such as translational, infectious diseases, bioprocessing, clinical, or public health studies, ultimately leading to a Master's Thesis. The requirements for the thesis may vary according to the discipline, but it will generally follow a basic thesis, publication, or grant proposal structure, which includes an abstract, introduction, results, discussion, figures and legends, and a bibliography.

RES 6201

Master Thesis (MS)

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: All Terms

Pre-requisites: Pre-req: MS Thesis students only

This course is intended for second-year Master of Science in Applied Life Sciences students, who wish to conduct thorough primary or secondary research in areas such as translational, infectious diseases, bioprocessing, clinical, or public health studies, ultimately leading to a Master's Thesis. The requirements for the thesis may vary according to the discipline, but it will generally follow a basic thesis, publication, or grant proposal structure, which includes an abstract, introduction, results, discussion, figures and legends, and a bibliography.

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RES 6220

Master Thesis (MSTM)

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 15.0

Terms Offered: All Terms

Pre-requisites: Pre-req: MS Thesis students only

The goal of this course is to provide the necessary skills and knowledge to MSTM program students for conducting comprehensive primary research for their Master's Thesis. The research will begin at City of Hope after completion of all mandatory core science and advanced technical classes at Keck Graduate Institute.

RES 6230

Master Thesis (MSBRD)

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 6.0

Terms Offered: All Terms

Pre-requisites: MSBRD Thesis students only

The goal of this course is to enable second year students enrolled into the Master of Science in Bioprocessing Research & Development program to conduct rigorous research leading to the completion of a master's thesis. Thesis requirements will be modeled after a basic thesis or publication, and will have common components. These components include: abstract, introduction, methods, results, discussion, figures and legends, and a bibliography.

RES 6250

Master's Capstone Project (MSRA)

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 15.0

Terms Offered: All Terms

Pre-requisites: Pre-req: MS Thesis students only

The objective of this course is to enable students to utilize the knowledge and competencies gained from both core and advanced courses at Keck Graduate Institute by applying them to a tangible regulatory project at City of Hope. Before the commencement of the course, students are required to select a project location for each semester: Summer, Fall, and Spring. The initiation of research is contingent upon the successful completion of all mandatory core science and advanced technical courses at Keck Graduate Institute.

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RES 6260

Master Thesis (RA)

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 6.0

Terms Offered: N/A

Pre-requisites: N/A

RES 6261

Master Thesis (RA)

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: N/A

RES 7000

PhD Research & Milestones

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 13.5

Terms Offered: All Terms

Pre-requisites: PhD program students only

The mission of KGIs PhD in Applied Life Sciences is to endow a select group of students with expertise in research areas relevant to applied bioscience, with the ability to use interdisciplinary tools and approaches to solve problems, and with the motivation to translate knowledge to beneficial applications to advance new horizons in the applied biosciences. The objective of this course is to guide doctoral students in the fulfillment of their major program milestones and ensure a streamlined trajectory for program completion. Students will complete milestones based on their corresponding year in the program, which will culminate in the student delivering their final Dissertation Defense presentation. (ALS 504) Students complete milestones based on their corresponding year in the program, which culminates in the student delivering their final Dissertation Defense presentation to the public and a Committee-approved final published Dissertation.

RES 7010

PhD Dissertation Writing

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 0

Terms Offered: All Terms

Pre-requisites: PhD program students only

RES 7010 supports doctoral students during the dissertation writing stage of their degree. The course provides structure, accountability, and faculty oversight as students work toward the completion of their dissertation research and writing. Students will engage in consistent scholarly writing, maintain communication with their dissertation committee, and demonstrate measurable progress toward dissertation completion. This is a Pass/No Pass course grounded in individualized milestones rather than graded assignments.

SCI 5000

Molecular Biotechnology

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

Students will be exposed to the conceptual foundations of biotechnology and the role played by discoveries and applications of molecular biology principles in advancing biotechnology industry horizons. This is a case-based course in which students will read landmark original papers that shaped (or are shaping) biotechnology, and discuss these in the class. The first half of the course explores targeted editing of the genome using CRISPR/Cas9 through the critical analysis of a landmark research report, and explores the foundational basis of present and future directions of biotechnology. The second half of the course will explore the role of the microbiome in human health and potential therapies.

SCI 5100

Molecular Basis of Disease

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: Pre-req: SCI 5000

The list of diseases with known molecular basis includes (among others) many inherited disabilities of various types, metabolic disorders, cancer, and infectious diseases. The idea that some diseases are due to genetic causes, a demonstration of which dates back to the early 20th Century, has now been expanded to include the possibility that all recognized human disorders may involve one or more genetic components of the patient. Since the genetic or epigenetic (in the case of identical twins) endowment of every human being on earth is different we must take seriously the concept of personalized medicine.

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SCI 5210

Clinical Pharmacology I

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: N/A

This course examines the role of genes, proteins and RNA in causing or combating diseases, and emphasizes the current conceptual and analytical tools that are brought to bear, and their limitations, on our understanding.

SCI 5220

Clinical Pharmacology II

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: SCI 5210

This class is an overview of clinical aspects of psychopharmacology. It will review some basic pharmacologic principles, it will survey the current consensus on the nature of the most common diseases and their treatments, and finally it will discuss modern pharmacology role in society. At the end of the course, you should have a good idea of the role of drugs in medical treatment along with awareness of their relative benefits and risks. You will also learn basic principles of how pharmacology fits into the larger context of clinical biology. Along the way we will discuss the grand scheme of things, partly because its interesting but mostly because it will provide a framework for dealing with new ideas and developments as they occur in your career.

SCI 5230

Medical Harm Reduction

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: N/A

Pre-requisites: N/A

In the search for new and better drugs and therapies, it is often forgotten that medical care is probably the leading cause of death and disability in the United States. Some experts have asserted that reducing preventable harms by 50 percent would save more lives than curing all cancers. This course will explore the most common causes of medical harm and will review current and proposed approaches to improving medical quality. The course contains active and interactive learning activities and will systematically

survey the current major medical quality initiatives.

SCI 5240

Medical Terminology

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This course is an introduction to the use and meaning of the medical terminology used in various allied health fields. Students are introduced to the fundamentals medical terminology in order to build an extensive medical vocabulary for a range of body systems.

SCI 5250

Introduction to Clinical Medicine

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: N/A

Pre-requisites: N/A

The course will review the basic concepts in the most important areas of modern medicine in a systematic manner by using actual cases and their outcomes. Students will analyze the cases, provide a differential diagnosis, list the additional information they need, make a final diagnosis and recommend treatment. Discussion of each aspect will be the central activity of the course.

SCI 5300

Pharmaceutical Discovery

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

The course will follow the process of pharmaceutical drug discovery from selection of targets to discovery of a product candidate, and the characterization of that drug necessary for initiation of clinical trials. You will learn the key steps that define how potential drugs are identified, optimized, and characterized in the preclinical setting and gain understanding of the key management challenges in the drug discovery process. The course will provide the terminology, timelines and practical examples for successfully understanding the challenges in progressing an idea for a drug from the earliest discovery stages through

to clinical trials. Case studies from industry will be presented detailing companies and products that utilize state-of- the-art drug discovery technologies. This is a science course that freely intersperses business and regulatory issues into the lectures and assignments.

SCI 5310

Pharmaceutical Development

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

The course will follow the process of pharmaceutical drug discovery from selection of targets to discovery of a product candidate, and the characterization of that drug necessary for initiation of clinical trials. You will learn the key steps that define how potential drugs are identified, optimized, and characterized in the preclinical setting and gain understanding of the key management challenges in the drug discovery process. The course will provide the terminology, timelines and practical examples for successfully understanding the challenges in progressing an idea for a drug from the earliest discovery stages through to clinical trials. Case studies from industry will be presented detailing companies and products that utilize state-of- the-art drug discovery technologies. This is a science course that freely intersperses business and regulatory issues into the lectures and assignments.

SCI 5500

Principles of Biology and Biochemistry

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

This introductory course in basic principles of biochemistry and biology is intended for students with no prior knowledge of life sciences or for those who want a refresher in their biology and biochemistry basics. The course will cover basic properties, functions and properties of simple peptides, proteins and monoclonal antibodies, carbohydrates, and lipids. Introduction to cell factory - cellular reactions involved in cell growth and metabolism, translation, transcription, and replication, basic principles of protein expression and purification.

SCI 5700

Medical Diagnostics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Fall Terms

Pre-requisites: N/A

The In Vitro Diagnostics (IVD) industry focuses on developing methods for the diagnosis, screening, monitoring, and prognosis of human diseases and to aid in therapy selection. IVDs identify and quantify biomarkers that can entail small molecules, proteins, DNA/RNA, or pathogens as well as cells and tissues of a certain phenotype. Developing diagnostic assays, instrumentation and devices requires input from many disciplines such as biochemistry, molecular biology, engineering, and computer science. This course provides an overview of the in vitro diagnostics industry and will enable students to acquire the basic knowledge and skills needed to understand and ultimately design diagnostic assays and devices. The course also features aspects of user research, marketing / competitor analysis, device regulatory affairs and program management. Through a semester long project that involves the entire section, students will learn how to develop an IVD in a complex team environment.

SCI 6000

Advanced Molecular Biotechnology

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Throughout this course, students will receive a comprehensive understanding of the foundations of biotechnology and its applications in translational medicine. The course will cover the latest technologies and therapies available, including the significant role of the microbiome in various health areas. The students will explore the microbiome's relationship with human health and potential therapies currently available on the market or in development. Additionally, the course will emphasize the importance of personalized nutrition in maintaining and enhancing health, utilizing genetic, phenotypic, medical, nutritional, and other relevant information.

SCI 6100

Pharmacogenomics and Precision Medicine

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: N/A

Many treatment protocols for different medications still follow a "one-size-fits-all" approach. However, with the rapid progress in pharmacogenomics, pharmacogenomics tests in clinical practice have become a reality for some therapy areas. This course aims to provide an overview of the fundamentals of pharmacogenomics and understand how it can be integrated with disease-specific applications.

SCI 6110

Advanced Pharmacogenomics and Precision Medicine

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: Pre-req: SCI 6100

The majority of current treatment protocols for various medications are still in the one-size-fits-all model. However, with rapid advances in the field of pharmacogenomics filed, the implementation of pharmacogenomics tests into clinical practice has become a reality for some therapeutic areas. The goal of this course is to review the basics of pharmacogenomics and to learn how they can be combined with disease-specific applications.

SCI 6300

Advanced Pharmaceutical Discovery

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: Pre-req: SCI 5300

This course is designed to deepen your understanding of drug pharmacokinetics and pharmacodynamics, offering a comprehensive insight into the processes involved in new drug discovery utilized by pharmaceutical and biotechnology companies. Throughout this course, you will gain a thorough understanding of the methods used to identify, optimize, and characterize potential drugs in the preclinical phase while also learning how companies evaluate their projects to decide whether to proceed or discontinue their development.

SCI 6301

Advanced Pharmaceutical Discovery Lab

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: Pre-req: SCI 6300

This course reinforces the knowledge of drug pharmacokinetics and pharmacodynamics gained in the Advanced Pharmaceutical Discovery course. It will involve a drug repurposing project, where laboratory drug discovery screening of FDA-approved drugs will be conducted against microbes of clinical significance. The outcomes of the project will be presented by teams and reported individually. This technical course will also cover business and regulatory issues through workshops and assignments.

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SCI 6310

Biotechnology-Based Therapeutics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: While not a prerequisite, SCI 5310 provides a better basis for understanding the material in SCI 6310

Advances in genomics, proteomics, recombinant protein technology and structural biology have created opportunities and challenges for the biotech and pharmaceutical industries. This course will provide students with a background of the scientific basis of some key aspects of biotechnology-based drugs that involves design, discovery and development process. Students will learn about therapeutic and vaccine targets, and how the drugs and vaccines are designed, tested and produced. They will also learn about recently developed biological pharmaceuticals along with many of the current targets of pharmaceutical companies. The mechanism of many of the current biotechnology-based therapeutics will be discussed. A group project will be required in which each group will provide a short business plan for the development of a new biologic drug. This course will consist of lectures, seminars, student presentations and group discussions. Environmental, ethical, regulatory, patent, economic and social issues related to biotechnology-based therapeutics will also be discussed.

SCI 6311

Cell-Produced Therapeutics

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 2

Pre-requisites: N/A

Advances in genomics, proteomics, recombinant protein technology and structural biology have created opportunities and challenges for the biotech and pharmaceutical industries. This course will provide students with a background of the scientific basis of some key aspects of biotechnology-based drugs that involves design, discovery and development process. Students will learn about therapeutic and vaccine targets, and how the drugs and vaccines are designed, tested and produced. They will also learn about recently developed biological pharmaceuticals along with many of the current targets of pharmaceutical companies. The mechanism of many of the current biotechnology-based therapeutics will be discussed. A group project will be required in which each group will provide a short business plan for the development of a new biologic drug. This course will consist of lectures, seminars, student presentations and group discussions. Environmental, ethical, regulatory, patent, economic and social issues related to biotechnology-based therapeutics will also be discussed.

SCI 6401

Fundamental Papers in Molecular Biology and Biotechnology

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

This course introduces fundamental papers in molecular biology and biotechnology that have led to the development of extraordinary biotech drugs that utilize our knowledge of the basis of diseases to specifically address the underlying cause with a precise remedy. These fundamental papers will be the source of small group presentations in which the group will develop a deep understanding of the topic through additional reading and studying. It is expected that the group will productively guide the discussion, address difficult questions, identify connections to other research topics, and suggest implications of the work presented in the paper. Also, in small groups, the students will prepare a high quality, short review paper on a topic in disease biology chosen by the group. This mini-review paper will provide the opportunity to learn how to assemble a coherent picture of a scientific field from a collection of original articles and use published data to develop a consensus picture and to clearly and coherently present that consensus understanding to the other students in the course.

SCI 6410

Fundamental Papers in Applied Medicine

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: Pre-req: N/A

This course delves into a few ground -breaking original research papers that have shaped the concepts and technologies of modern biomedical research, with a special focus on cancer immunotherapy. The goal is to understand the logic and principles of doing biological experiments: the importance of models and hypotheses, testable versus untestable hypotheses, controls, the limits of interpretation dictated by the results, how changing paradigms influence the progress of science. A few of the chosen publications are considered classic, their approaches to addressing the unknown questions of the day and their conceptual contributions remain valid even today. Others are more recent but have already begun to impact our understanding of cancer immunotherapy.

SCI 6500

Virology

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 1

Pre-requisites: N/A

This course introduces the basic principles of virology. The focus will be on viruses that have been involved with epidemics, pandemics, and outbreaks, along with the strategies that they use to infect and

propagate. The molecular biology of viruses and how viruses are able to accomplish so much with so little genetic information will be described. In addition, because viruses have had such an impact on our global societies, there will be an overview of the medical aspects of the diseases and the development of vaccines to immunize against the infection. The course will also introduce how viruses are used for targeted therapeutics (gene therapy).

SCI 6510

Medical Microbiology and Infectious Diseases

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Fall Term Module 2

Pre-requisites: N/A

This course comprehensively explores infectious pathogens and the human diseases they trigger. It equips students with the ability to understand microbial pathogenesis and the distinct mechanisms through which certain pathogens induce diseases. The course empowers students to apply foundational knowledge of medical microbiology in analyzing disease-specific scenarios and evaluating the factors contributing to the emergence and resurgence of infectious diseases. Additionally, students will critically assess the One Health approach, which underscores the interconnectedness of human, animal, and environmental health and its significance in enhancing preparedness and responses to disease outbreaks.

SCI 6600

Infectious Diseases Epidemiology

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: MATH 5020 (can be co-enrolled) or by instructor permission.

Epidemiology is the study of the distribution and determinants of health problems, with the goal of disease management/control/prevention. This course will provide an overview and introduction to epidemiology, while exploring considerations specific to infectious diseases, such as outbreak detection, contact tracing, containment, and vaccination. Statistical and methodological approaches used in epidemiological research will be examined. In addition to applications in public health and clinical practice, this course will consider the role of epidemiology in targeting unmet medical needs and identifying opportunities for innovations that detect, treat, or prevent such problems. Special attention will be given to the issues of preparing for and responding to epidemics and other extreme outbreaks through examination of recent viral and bacterial epidemics.

SCI 6700

Advanced In-Vitro Diagnostics

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School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 3.0

Terms Offered: Spring Terms

Pre-requisites: Pre-req: ENG 5200

This course covers emerging, high impact, and high growth rate areas of the in vitro diagnostics (IVD) industry such as novel immunoassay formats, diagnostic applications of flow cytometry, molecular diagnostics and pharmacogenomics, personalized medicine and drug diagnostic co-development, point of care diagnostics in developed countries and in global health/limited resource settings, as well as micro-fluidics and nanotechnology in diagnostics.

SCI 6710

Technologies for Biomarkers and Drug Discovery

School: Henry E. Riggs School of Applied Life Sciences

Course Credit: 1.5

Terms Offered: Spring Term Module 1

Pre-requisites: N/A

This course focuses on the use of high throughput technologies in biomarker discovery, small molecule drug discovery, and basic research. In the context of biomarker discovery, we will cover proteomics based on mass spectrometry and other methods. Relevant to nucleic acid biomarkers, we will discuss next generation sequencing based approaches for genomic, epigenomic, and transcriptomic analyses, in addition to microarray and PCR based methods. Relevant to drug discovery, we will discuss disease model systems and high throughput as well as high content (i.e. cell-based) methods for compound library screening and lead optimization. The trend towards personalized medicine has encouraged the pharmaceutical and diagnostics industries to partner more closely. Biomarkers discovery and validation is of central importance in advancing personalized medicine. The course consists of class discussions, assigned readings and computer exercises, in addition to student presentations.

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KGI Academic Policies and Procedures

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KGI Academic Policies and Procedures

The policies and procedures contained in this catalog are subject to revision at any time with little or no advance notification. The Institution reserves the right to amend these policies and procedures at any time. Students will receive email notifications related to any substantive changes to this catalog. To the degree possible, substantive changes will only be made between academic years.

Academic Calendar

Unless otherwise noted, all course work completed at KGI is under a semester system which is ap- proximately 15 weeks in length. Module courses are approximately eight weeks. To view the academic calendar, please click here.

Academic Freedom

Keck Graduate Institute believes fervently in the importance of academic freedom to its mission, goals, and its academic quality. Faculty and students are encouraged to explore intellectually without limit and to publish and speak out without fear of retribution in the pursuit of knowledge. Keck Graduate Institute defines academic freedom as the right of a faculty member to posit and express the full range of activities necessary in the production of knowledge. These activities include, without limitation: research focus, determining the scope and methods of teaching, and presenting research findings internally to colleagues and externally to the public and in published findings. Intellectual dis- course, including disagreement and debate, is fundamental to the processes of learning and research and is protected by this policy statement of the Institute. However, the exercise of academic freedom may not violate any other policy of the Institute, external accrediting body, federal, state, or local law. In addition, academic work should be evaluated and discussed based on the standards of the scholarly community, not external political or ideological considerations.

Academic Standards

High academic standards are critical to ensuring academic integrity and quality at KGI. Each academic semester, students identified as not meeting the requirements for minimum progress are reviewed by the school and/or program-specific progression committees to determine whether the problem lies with administrative matters, such as reporting of grades, or with academic performance. Students have the opportunity to explain any special circumstances to the progression committee.

The progression committee will communicate a recommendation to the respective academic dean, who will communicate a decision to the student via email and mail. Students placed on academic probation may appeal the decision to the Provost within 5 business days. The appeal must include significant extenuating circumstances impacting academic performance with accompanying documentation. Decision of the Provost in response to the appeal is final.

Students placed on academic probation are required to work with Academic Affairs and the Division of Student Affairs to develop a suitable plan to make every effort to ensure adequate academic

progress in the subsequent semester. Students that are placed on academic probation will be ineligible to continue to hold leadership positions in professional organizations, clubs, and committees.

Each organization/club is responsible for holding special elections to replace the vacated position. The respective academic dean and program director will replace students on committees.

Academic Integrity Policy

I. Introduction
The mission of KGI includes cultivating in each student not only the academic skills that are required for a graduate degree, but also the characteristics of academic integrity that are integral to ethical leadership. It is, therefore, part of the mission of the university to nurture in each student a sense of responsibility consistent with the ethical teachings of honesty and accountability. Furthermore, a breach of academic integrity is viewed not merely as a private matter between the student and a professor, but rather as an act fundamentally inconsistent with the purpose and mission of KGI.

This Academic Integrity Policy (AIP) represents a valuable educational tool for guiding faculty, staff, and students in their efforts to create a sense of community and for expressing the values that are at the core of KGI. As members of an academic community, we work together to answer difficult questions, often collaborating to answer these questions, to solve problems, and to communicate effectively the knowledge we acquire through inquiry. This document calls attention to the responsibilities we have to one another in being authentic in our attempts to represent others' views, and it helps us to understand the responsibilities we have toward one another, students and faculty alike, and toward academic scholarship, as we endeavor to uphold the ethical standards of our community.

II. Academic Integrity Pledge

A. Knowledge and Education of Responsibilities
A student has the responsibility to become familiar with the Academic Integrity Policy as well as the philosophy behind it. KGI is a place where ethical integrity is learned and emphasized as a critical component of an academic education. Personal integrity and community responsibility are a core part of KGI life.

1. As a condition for matriculation, students are expected to familiarize themselves with and to uphold the Academic Integrity Policy in all academic affairs at KGI.

2. Students should familiarize themselves with the directives given by the professor, whether verbally or in writing, in each class concerning what is and is not permitted, especially in matters of group projects, written reports, and the attribution of research to sources (in-text citing, footnoting, a complete bibliography), including the internet and its applications.

III. Academic Integrity Responsibilities: Student

A. Academic Behavior: Personal
1. All work submitted for credit, including exams, is accepted as a student's own work, unless otherwise understood and approved by the professor.

2. Students may not, without proper citation and approval of the professor, submit work that has been copied, wholly or partially, from another student's paper, notebook, or exam. Nor may students without proper citation submit work which has been copied, wholly or partially, from a book, article, essay, newspaper, the internet, or any other written, printed, or media source, whether or not the material in question is copyrighted.

3. Work that paraphrases any written or printed media material without acknowledgment may not be submitted for credit. Ideas from sources such as books, essays, multimedia (like text, images, audio, video, animation), social media, or artificially intelligent (AI) generated materials, may be incorporated in students' work as starting points, governing issues, illustrations, and the like, but in each case the source must be cited.

4. Any and all online materials students used for a paper are also governed by plagiarism rules. Students need to cite all electronic sources as well as printed and other sources.

5. Generative AI tools (e.g., ChatGPT, DALL·E, or their equivalents) may be used only for tasks explicitly permitted by the instructor (e.g., brainstorming, scientific searching, code debugging, or data visualization). Use is prohibited for final analysis, presentation, preparation of figures or slides, graded writing, or take-home exams unless stated otherwise. Students must clearly disclose (and cite in accordance with #4) any AI use and confirm that it complies with assignment guidelines. Undisclosed or unauthorized use will be treated as a breach of academic integrity.

6. Students may not use notes or other forms of assistance on a test, such as videos, illustrations, AI generated materials, and the like, unless explicitly approved by the professor, nor may they provide such aid to other students.

7. Students may not use or submit work that has been generated from any form of a paid-for or free writing service.

8. Students may not submit any work for credit that has been used to fulfill the requirements of another course, previously taken or currently in progress at KGI, without obtaining permission of the professor in advance.

9. Students may not use any 3rd-party agent (e.g., other student, test taker, other imposter or software or virtual service) to assist in taking an examination.

Students must be aware that violations are not limited to the actions prohibited in the guidelines above. Any kind of dishonesty related to academics is a violation. Other examples of academic dishonesty, apart from giving or receiving unauthorized aid as described by the professor in each course, include but are not limited to:

a) Listing false reasons for taking a make-up examination.
b) Falsifying data.
c) Falsely representing oneself as another student or using another student's identifying information to complete academic work or complete academic assessment tests, attend university events, or gain access to and interact on the internet representing another party.
d) Falsifying grade information or course completion information.
e) Participating in activities that permit another student to engage in an academic integrity violation.

f) Purposefully concealing information about a known violation.
g) Misrepresenting oneself as being cleared to participate in commencement.

B. Academic Behavior: Collaborative
1. Working on material with other students is of great pedagogical value, and this policy should not be construed as discouraging such work. Unless such consultation is forbidden by a professor, students may work with other students on assignments and present ideas and even written work to their peers for comments and criticism. Each student, however, should be guided by the following:

a) If a professor explicitly permits or forbids certain collaborative work with other students, such work is permissible or forbidden as the professor indicates. A professor's explicit guidelines take precedence in determining whether certain actions are permissible.
b) It is a presupposition that ideas and expressions in a submitted paper or report originate from the writer unless otherwise indicated. Consequently, if ideas or expressions in written works originate from another person, whether the person is an author or fellow student, that source should be cited in an endnote or footnote. If an idea arises from the common effort of two or more students in conversation, this fact should be cited.
c) If a student is unclear about whether certain forms of consultation or common work are acceptable or what the standards for citation are, the student is responsible for consulting their professor.

C. Responsible Actions
1. Each student, as an integral member of the academic community, must make the ethical and moral commitment not to act dishonestly and not to tolerate academic dishonesty on the part of other students. If a student witnesses a violation of the Academic Integrity Policy or otherwise has reason to believe that a violation has occurred, the student may either urge that person to report themself to the professor or discuss this allegation with the professor of the course. In situations where a student has knowledge of a violation, they are expected to report that violation to a professor, department chair, or dean in a timely manner.

D. Opportunities to Serve on a Review Committee
1. Students may be able to participate in investigating and determining responsibility in alleged cases by serving on a Student Conduct Committee (SCC) (see the Academic Catalog for more details). Any student found responsible for a violation of the Academic Integrity Policy will immediately forfeit their eligibility to serve on a review committee.

IV. Academic Integrity Responsibilities: Faculty

A. Knowledge and Education of Responsibilities
1. All members of the faculty are required to become aware of the policies and procedures as outlined in the Academic Integrity Policy.

2. Deans and program directors are responsible for introducing new faculty to the policy. The orientation procedures should be done, when possible, prior to faculty activities in the classroom. The faculty member in charge of a particular course is responsible for educating and establishing guidelines for any teaching assistants in the course.

B. Academic Behavior: Classroom Expectations
1. Faculty are expected to include a written statement in their course syllabus stating the course

expectations for academic behavior, including the consequences of violations of those standards. This statement may be a referral to this policy or may elaborate on additional guidelines and expectations of the faculty.

2. Faculty are expected to explain the conditions under which students are permitted to share their work, for example, outlines that can form the basis of an exam or paper, take-home exams, lab reports, and in-class examinations. Faculty should also offer guidelines when asking students to work in teams or groups, for example, when inviting students to collaborate on problem sets, or to develop computer programs, either inside or outside of class.

3. Faculty are encouraged to distribute a handout with information about what constitutes plagiarism when assigning writing in their courses, keeping in mind the goal of teaching students how to use and document sources appropriately.

4. Faculty are encouraged to make provisions for early submission of drafts of written work so that students can refine their documentation skills before the final due date of the assignment.

5. Faculty are encouraged to take note of the guiding principles articulated in Section V to reinforce these principles and possible sanctions (see Chart A) in their discussions of the Academic Integrity Policy with students, and to explain how academic integrity expectations apply to the work in their class.

C. Academic Environment
1. Each faculty member will strive to establish an environment which supports the evaluation of students in a fair and reasonable manner. The purpose of this policy is not to test students' ability to perform in a highly competitive and stressful environment, but to help them develop habits of ethical character and to understand and practice academic integrity as a student and as a global citizen.

2. Faculty hold the primary responsibility for maintaining the above "fair and reasonable" learning environment. Faculty members (or designees) will usually be present in classrooms during examinations, fostering an environment which does not create temptations for dishonest action.

D. Responsible Actions
1. Any person with the responsibility to teach or assist in a course, or to direct or provide leadership of an academic or co-curricular activity, will not tolerate dishonesty.

2. Faculty are expected to provide written guidelines to the students in their course about classroom expectations for academic integrity. Reinforcing academic integrity expectations prior to student completion of key assignments is recommended.

3. Faculty are expected to follow standard procedures to notify the student in cases where they suspect academic dishonesty has occurred and to report the violation and sanctions given (see Section V.B.5).

V. Procedures for Handling Alleged Violations
A. Procedure
1. If a faculty member suspects an academic violation has occurred, the faculty member should gather information to support or refute their concerns. The faculty member may also choose to consult the program director, the dean, and/or the Associate Vice Provost of Academic

Effectiveness and Faculty Development to review the evidence, provide additional interpretation of the evidence, and/or check coursework from other current or past courses for evidence of further academic violations. The standard of proof for suspected academic violations is a preponderance of the evidence ("more likely than not").

a) If it is determined that the infraction appears to only affect one course, the faculty member should discuss the situation with the student(s) suspected of violating the policy. If this discussion and the evidence gathered result in the decision that the initial suspicion was unjustified, no additional action will be taken.

b) If evidence of academic integrity violations across multiple courses is found, the program director and/or dean may then choose to meet with the student, either along with or in lieu of the affected faculty member(s). If this discussion and the evidence gathered result in the decision that the initial suspicion was unjustified, no additional action will be taken.

2. If the faculty member believes that it is more likely than not that there was an academic integrity violation, they shall assign a sanction as appropriate according to the course syllabus, the standards of the discipline, and the department.

3. The faculty member will record the violation with the Associate Vice Provost for Academic Effectiveness and Faculty Development. Links to online reporting forms are available in the Faculty Resources folder in Box. The Office of the Provost designee will keep a record of the violation and send a letter to the student confirming their violation. Copies of the form and the letter will be sent to the faculty member, the program director, the chair of the program/school's progression committee, the dean of the school, and a student affairs designee.

4. Alleged violations of an academic nature not directly connected to one class may be referred to the Associate Vice Provost for Academic Effectiveness and Faculty Development by faculty or administrators for subsequent action by a Student Conduct Committee (see Section V.D).

B. Guiding Principles in Assigning Sanctions
1. If a student is found to have violated the Academic Integrity Policy, the faculty member must decide on the sanction (see Chart A). The faculty member should take into consideration the syllabus of the course and the severity of the offense. The faculty member, when assigning a sanction, may also consider as a mitigating factor the degree to which the student was honest and forthcoming regarding the violation, or any other evidence of sincere contrition. The faculty member may take into account sanctions invoked in previous cases of a similar nature and should consult the Associate Vice Provost for Academic Effectiveness and Faculty Development for this information.

2. Additional sanctions (e.g., academic probation for the program) may be given by program specific progression and professionalism committee as specified in their handbooks.

3. Discovery of an academic integrity violation provides the faculty member an opportunity to engage in discussions with the student about expectations of appropriate, ethical, professional behavior. Sanctions, although given as a disciplinary action, can also be used to ensure the student engages in activities to improve their practices and prevent subsequent recurrences. For example, sanctions may include having the student rewrite the assignment (even though they will receive no grade for the work). Faculty members need to clearly articulate to the student the consequences of any failure to complete the agreed upon sanctions.

4. Based upon the severity and frequency of the violation(s), suspension or dismissal from KGI may be the assigned sanction (see Chart A).

a) Academic integrity suspension is separation from KGI for at least one semester. The student is eligible to apply for readmission, but readmission after dismissal is not automatic.

b) Academic integrity dismissals are permanent separations from KGI with no opportunity to apply for readmission.

5. The Registrar must be notified by the Associate Vice Provost for Academic Effectiveness and Faculty Development of an academic integrity suspension or dismissal to place proper holds on student accounts.

a) The Registrar shall be copied in all letters to the student regarding suspension or dismissal.
b) The letters are archived in the student's permanent file.

C. Student Appeals Procedure

1. If the student feels that the sanction is unwarranted or unjust due to new information, procedural error, or an excessive or unjust penalty, they may utilize a process of appeal. The appeal procedure begins with the student initiating a meeting with the professor of record, then meeting with the program director, and finally meeting with the dean of the school, if warranted.

2. If, after completing step 1 (above), the student continues to feel that the final sanction is unwarranted or unjust due to new information, procedural error, or an excessive or unjust penalty, a formal grievance can be initiated by sending an email and then meeting with the Associate Vice Provost for Academic Effectiveness and Faculty Development within fifteen (15) business days from the date of the Office of the Provost's letter confirming the violation. The email to begin the formal grievance process should include:

a) A statement addressing how the appeal meets one or more of the three following criteria necessary for a formal appeal:

- New information or evidence exists that was not considered in the original appeal.
- An error was made in determination of the academic integrity violation (must have evidence to prove this error).
- Standards different from those established in written course, department, school, college, or KGI policies, if specific policies exist, were used in assigning the academic integrity violation.

b) A description of the outcome of the informal discussion process as described in Section V.C.1.
c) Any relevant documents the student would like to have reviewed as part of the appeal process.

d) A copy of the course syllabus and assignment descriptions.

D. Convening a Student Conduct Committee (SCC) Committee

1. Upon receiving a formal written grievance from the student, the Associate Vice Provost for

Academic Effectiveness and Faculty Development (or designee) will appoint a Student Conduct Committee (SCC). Each SCC shall include three faculty members (one from each school), two students (from each of the schools, not including the school of the student involved), and the Associate Vice Provost for Academic Effectiveness and Faculty Development (or designee). The Associate Vice Provost for Academic Effectiveness and Faculty Development (or designee) will serve as the review committee chair for all grievance hearings as a non-voting member. Student appointees must be approved by the Dean of Students or their designee.

2. The committee chair will schedule a hearing as soon as possible, with at least ten (10) business days' notice. The chair will also notify the student of the names of the review committee members with a request that, if the student has any reason to believe any member is biased, they should notify the chair immediately. The chair shall also inform the student(s) under suspicion that they can bring to the hearing a member of the university community (faculty, staff, or student) for support. The support person must be approved by the committee chair and will not participate in the proceedings. Legal counsel is not permitted. Family members are not permitted. The student may invite witnesses to be called in during the review proceedings. The student and faculty must disclose which witnesses they will bring and the topics the witnesses will address, as well as what information or documents they may bring, if any.

3. If any member of the SCC has a relationship with someone involved in the case which may compromise their objectivity, they should recuse themselves. The Associate Vice Provost for Academic Effectiveness and Faculty Development (or designee) will then appoint new members to the committee.

4. SCCs ordinarily do not meet during the final examination period. However, if the student who is suspected of a violation is a graduating student during their final semester, the review committee must make every reasonable effort to meet prior to graduation.

5. Except for the required notifications as set forth throughout this policy, all SCC proceedings are to be strictly confidential. Information regarding such proceedings is to be disclosed only on a legitimate need-to-know basis, or as required by law.

6. Before the hearing, committee members should not discuss the allegation or the evidence with the student suspected of the violation. If a student suspected of a violation has questions about the Academic Integrity Policy and the procedures of the hearing, they should contact a faculty member who is not involved in the review of the student's case. The consulted faculty member should not discuss the evidence against the student under suspicion nor make any recommendation about how the student should respond to the suspicion of a violation but should only discuss the hearing procedures and principles of the policy.

7. The hearings are administrative and concern internal university affairs; accordingly, the hearings are informal and are not subject to formal rules of civil procedure or evidence. The hearings are not open to the public, nor does the student under suspicion (or any other individual involved) have the right to legal counsel at the hearing.

8. The chair of the review committee should open the hearing by briefly presenting the allegations. Next, the professor of the course and/or any other individual(s) reporting the allegations should present their evidence of the alleged violation. The student suspected of a violation may question the professor or other witnesses concerning the evidence, as may the review committee members. The student may then present their own witnesses, including their own testimony, and any other evidence. The review committee members may then question the

student under suspicion and any of the other invited witnesses. Witnesses called by the student and the committee will testify individually and will not be present during the testimony of other witnesses.

9. At the end of this process, the professor and any other witnesses are excused. At this point, the student has the opportunity to respond further to the charges, if they so desire, by making a statement to the committee members. The student is then dismissed, and the SCC members deliberate.

10. After deliberation, the SCC decides, by a majority vote, whether the evidence supports a finding that the student under suspicion more-likely-than-not violated the Academic Integrity Policy or whether the evidence does not support such finding, in which case, the charges are dismissed.

11. If it is found that the evidence does not support a finding that a violation has occurred, the chair of the review committee notifies the student and the professor in writing of this decision. This notification should, if possible, be sent within two days of the hearing.

12. If a student is found to have violated the Academic Integrity Policy, the SCC must decide to uphold the sanction as given by the faculty member or assign a different sanction that will supersede the sanction from the faculty member. The committee should take into consideration the course syllabus and the faculty member's recommendation on the reporting form.

E. Notification Process
1. If the SCC decides a student is responsible for an offense and assigns a sanction, the chair of the review committee notifies the student in writing of the committee's decision and of the sanction within one week of the hearing. A copy of the letter is sent by the Associate Vice Provost for Academic Effectiveness and Faculty Development, to the dean of students, the dean of the school, the program director, and the professor of record.

2. The professor of the course, upon receipt of the letter from the SCC, will execute the sanction that the review committee has determined to be appropriate.

3. If the semester's grade must be submitted before the necessary hearing procedures and appeals are completed, an IN (incomplete) grade will be authorized by the Associate Vice Provost for Academic Effectiveness and Faculty Development.

4. A finding of responsibility for academic dishonesty with regard to a particular course will void any earlier withdrawal from that course. A grade of "F" in a course assigned due to an academic integrity violation will preclude a subsequent withdrawal from that course. A finding of responsibility for academic dishonesty may be considered in academic probation extensions and appeals.

VI. Records of Violations and Repeated Violations
A. Records
1. The Associate Vice Provost for Academic Effectiveness and Faculty Development will maintain records of all academic integrity violations. These records are used to keep account of repeated student offenses, provide aggregated data of academic integrity issues at the university, and provide data to programs on campus that need information about violations. The Associate Vice Provost for Academic Effectiveness and Faculty Development will retain such records for seven (7) years after the student's graduation or separation from KGI and will reveal

their contents to others only with a need to know, with the written approval of the student, or if required by law. A copy of the letter documenting a violation will also be kept in the student's Student Affairs file.

2. When the Associate Vice Provost for Academic Effectiveness and Faculty Development receives a report that an academic integrity policy violation has been established, that office checks the files to determine if the student has a previous violation. If so, the Office of the Provost designee will forward the violation records to the dean of the school, who may assign a further sanction for the repeated offense. The standard sanction for a repeated offense is suspension or dismissal from KGI.

3. It is the responsibility of the Associate Vice Provost for Academic Effectiveness and Faculty Development, upon recommendation of the dean, to notify the student, the program director, the Dean of Students, and the Registrar of the suspension or dismissal of a student.

B. Admission After Dismissal
1. In order to be considered for re-admission to KGI after dismissal, a suspended student must submit an application which must be approved by the Associate Vice Provost for Academic Effectiveness and Faculty Development and the dean of the school to which the student wishes to be admitted.

2. In the case of suspension, a student's transcript will read Academic Integrity Suspension; and in the case of dismissal, it will read Academic Integrity Dismissal.

VII. Chart A – Types of Violations and Possible Sanctions Reference

Defining Minor and Major Violations

Minor Violation

- A minor violation is recognized by the faculty member as a violation of concern, but not of the level of severity to warrant the student's automatic failure of the course.
- See Level I and Level II

Major Violation

- A major violation is recognized by the faculty member as a violation of significant concern, warranting at minimum the student's automatic failure of the course.
- See Level III and Level IV

Level I

Description
Level I violations may occur because of inexperience or lack of knowledge of principles of academic integrity on the part of persons committing the violation. These violations address incidents when intent is questionable and are likely to involve a small fraction of the total course work, are not extensive, and/or occur on a minor assignment.

Registering a Level I violation provides the opportunity for the students to receive further education of academic integrity policies and the importance of academic integrity to the academy.

Repeated offenses of this type would be considered a Level II violation.

Examples of Violations

- Working with another student on an assignment when such work is prohibited.
- Failing to footnote or give proper acknowledgment in an extremely limited section of an assignment.
- Sharing work with another student that is then submitted by that student as their own work.
- Seeing a violation and not informing a faculty member.

Examples of Sanctions
Level I violations should lead to one or more of the sanctions listed below, with the type and number based on the faculty member's discretion.

- Reduction or no credit given for the original assignment (not to include a zero for the assignment in question but may entail dropping the grade from an average or allowing the student to re-do and resubmit the assignment with or without an additional requirement that is graded).
- An assigned paper or research project on a relevant topic.
- A make-up assignment at a more difficult level than the original assignment.
- Required attendance in a noncredit workshop or seminar on ethics or related subjects.
- Required submission of future papers through plagiarism detection software.
- Required submission of a draft paper and meeting with the instructor.
- Requiring that all future take-home tests are proctored for the student.

Level II

Description
Level II violations are breaches of academic integrity that are more serious or that affect a more significant aspect or portion of the coursework compared with Level I violations.

Examples of Violations

- Repeated offense of Level I violation.
- Quoting directly or paraphrasing, to a moderate extent, without acknowledging the source.

- Submitting the same work, or major portions thereof, to satisfy the requirements of more than one course without permission from the instructor to whom the work is submitted for the second or subsequent time.
- Using data or interpretive material for a report without acknowledging the sources or the collaborators. All contributors to the acquisition of data and/or to the writing of the report must be acknowledged.
- Failure to acknowledge assistance from others, such as help with research, statistical analysis, computer programming, or field data collection, in a paper, examination, or project report.
- Sharing one's own work with another person when prohibited by the instructor.
- Failing to acknowledge the use of AI and claiming work as the student's own in the form of text, imagery, graphs, charts, or any resource provided by AI. Examples include but are not limited to: Copying or paraphrasing, plagiarizing, altering text to look as one's own, claims of authority or legitimacy, or fabricating or duplicating sources provided by AI.

Examples of Sanctions
Level II violations should lead to a failing grade on the assignment. In addition to a failing grade, other sanctions are recommended to provide a learning opportunity for the student.

- Required participation in a noncredit workshop or seminar on ethics or academic integrity.
- A makeup assignment that is more difficult than the original assignment.
- Voiding any credit for the original assignment and requiring the student to complete another equivalent assignment to receive credit and verify knowledge.
- Required submission of future papers through plagiarism detection software.
- Required submission of a draft paper and meeting with the instructor.
- Requiring that all future take-home tests are proctored for this student.

Level III

Description
Level III violations are those that go beyond Level I or II violations and that affect a major or essential portion of work done to meet course requirements, or involve premeditation, or are preceded by one or more violations at Levels I and/or II.

Examples of Violations

- Repeating Level II violations (note that three Level II violations equate to one major violation – see above).
- Presenting the work of another as one's own. This includes having another person complete online coursework and presenting it as one's own.
- Copying on examinations.
- Plagiarizing major portions of a written assignment.
- Acting to facilitate copying during an exam.
- Using prohibited materials, e.g., books, notes, or calculators, during an examination.
- Conspiring before an exam to develop methods of exchanging information and implementation thereof.
- Altering examinations for the purposes of regrading.
- Acquiring or distributing an examination from unauthorized sources prior to the examination.

- Submitting purchased materials such as a term paper or other materials.
- Removing or damaging posted or reserved material, or preventing other students from having access to the material.
- Fabricating data by inventing or deliberately altering material. Fabrication includes citing “sources” that are not, in fact, sources.
- Using unethical or improper means of acquiring data.
- Violating programmatic exam policies.

Examples of Sanctions
Level III violations should lead to one or more of the following sanctions:

- Failing grade for the course.
- Possible suspension from KGI for one semester.
- Possible dismissal from KGI.

Level IV

Description
IV violations represent the most serious breaches of intellectual honesty.

Examples of Violations

- Repeating a Level III violation.
- Committing a violation of academic integrity after returning from suspension for a previous violation of academic integrity.
- Committing a violation of academic integrity that breaks the law or resembles criminal activity (such as forging a grade form, stealing an examination from a professor or from a KGI office, buying a stolen examination, falsifying a transcript to gain access to KGI or its resources, or altering the record of work done at KGI).
- Having a substitute take an examination or taking an examination for someone else.
- When completing a significant scholarly project (e.g., research, a senior thesis, a capstone project), fabricating evidence, falsifying data, quoting directly or paraphrasing without acknowledging the source, and/or presenting the idea of another as one’s own.
- Sabotaging another student’s work through actions designed to prevent the student from successfully completing an assignment.

Examples of Sanctions
Level IV violations should lead to the following sanction:

- Permanent dismissal from KGI.

VIII. References

The policy was originally adapted from the Azusa Pacific University (2024) and the Notre Dame Honor Code (2007).

Cumberland University Academic Integrity Violations and Recommended Sanctions (accessed Spring 2017)

University of South Florida Academic Integrity Violations of Professional and Ethical Standards (accessed Spring 2017)

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Active Not Enrolled Policy

The MBM, MCHA, and CBM programs at KGI offer flexible, rolling admissions and allow for both part-time and full-time enrollment. Due to the self-paced nature of these programs, students may not be actively registered for courses during a given term for the following reasons:

- Course Availability: Students progress at their own pace, and a required course may not be offered during a specific term.
- Selective Enrollment: Students may choose to enroll in only a Module 1 or Module 2 course within a given term, but not both.

In most KGI programs, students who are not actively enrolled in courses during a term are considered “Withdrawn.” However, recognizing the unique structure of the MBM/MCHA/CBM programs, students in these programs will be considered “Active but Not Enrolled” for internal tracking purposes under the following conditions:

- The student is not registered for a single term due to reasons noted above.
- The student resumes enrollment by registering for courses in the following term.

In these cases, students are not required to submit a Withdrawal or Leave of Absence form, provided they do not remain unregistered for more than one consecutive term.

Important Notes:

- If a student fails to enroll in courses for two consecutive terms, they must submit either a Withdrawal or Leave of Absence form to the Office of the Registrar. Re-enrollment after such a gap will require applying through the Readmissions process.
- If no formal documentation is submitted, the student will be administratively withdrawn from the program.
- Enrollment Status (External Reporting): For compliance and reporting purposes, the Office of the Registrar will report these students as “Withdrawn” or “Less Than Half-Time” to the National Student Clearinghouse (NSC) and the National Student Loan Data System (NSLDS), as no credit hours are associated with this enrollment.

Please refer to the policies on Withdrawal, Leave of Absence, and Readmission for additional details.

Admission into New Program – Continuing Students Policy

Students who wish to transition into a new academic program (e.g., Certificate to MS, MS to PhD) after completing their current program must notify the Office of Admissions.

The Admissions Office will assist the student in completing the following steps:

- Submitting an application for the desired program
- Participating in any required admissions interviews

If the student is accepted into the new academic program, the Admissions Office will issue an

official acceptance letter and notify all relevant departments.

Following notification, the Office of the Registrar will enroll the student in the appropriate courses for the new program.

Advisement

An important factor in a student's success is to provide the student with available advising, counseling, and mentoring. Mentoring, including academic advisement, will be provided by all faculty members. Each student will be assigned a faculty advisor. All students will meet with their faculty advisor to discuss program, academic, professional/career issues, and any other programmatic requirements.

The faculty advisor will meet with the student to discuss academic difficulties and recommend strategies for academic success. Faculty advisors will also track students' professional requirements and program progression.

Attendance Policy

Attendance Policy (Didactic Courses)

Attendance is mandatory. Students are expected to attend and appear on time at all classes, work- shops, labs, seminars, and other instructional activities associated with the courses in which they are enrolled. Since teamwork is an integral part of KGI's learning environment, attendance is important not only for the individual student, but also for their colleagues. However, there are instances in which students are unable to attend class and those absences may be excused. Excused absences are described in the following sections. Absences not covered by this policy may be excused at the discretion of the instructor or course coordinator.

Students can be dropped seven calendar days after the start of the semester if they:

1. Fail to meet the attendance requirement (as defined above) during the first week of class, OR
2. Fail to contact the instructor in the event of a technical problem, OR
3. Fail to contact the instructor during the first week of class regarding their inability to complete either #1 or # 2 above

In addition, any student failing to meet the attendance requirement for more than two consecutive weeks may be sent a "stopped attending" letter. At midterm, the Institute will administratively drop any student who has failed to meet the attendance requirement as set forth by the instructor. After midterm, students who stop participating in a class without officially dropping a class and who are not administratively dropped may receive a grade of "F" for the course. This may also have an impact on certain financial aid awards. It is ultimately the responsibility of the student to drop a course. Any student who can't meet the attendance requirements for a given week should contact their instructor immediately.

Student Responsibilities

Students should make prior arrangements if missing a non-assessment day class is unavoidable; such requests should be made to the instructor or course coordinator prior to the absence and as early as possible. Documentation for excused absences must be submitted to the instructor or course coordinator in writing within three (3) business days upon return to school. Review of the documentation will determine whether an excused absence is warranted. The student must present appropriate documentation to be granted an excused absence.

The following are considered excused absences:

- Personal illness or injury. For an excused absence, written documentation from a physician or other qualified medical professional will be required as supporting documentation. However, no protected health information or confidential medical information is required to be submitted or documented.
- A personal emergency or emergency in the student's immediate family (i.e., parent, grandparent, guardian, spouse, child, or sibling of the student) such as death, hospitalization, or other emergency situations.
- Attendance at a professional meeting if the absence has been pre-approved by the instructor or course coordinator.
- Jury duty and Immigration/Naturalization Interview. For jury duty, please visit this page for more in- formation. For Immigration/Naturalization Interview, students should contact KGI's International Stu- dent Advisor.
- Religious observance accommodations will be considered. Each student must individually submit a request for absences due to religious observances by the first day of each semester and work with the instructor or course coordinator to minimize disruptions to the educational process and to schedule makeup activities. Only holidays recognized by the TCC Chaplain Services will be considered.
- Falsification of documentation is considered a violation of the School's Honor Code and will result in disciplinary action up to and including termination. The student will be held responsible for all work of a class missed during any absence. Opportunities to make up missed points in the form of class activities and quizzes will be at the discretion of the instructor or course coordinator.

Policy Regarding Missed Assessments

A missed assessment will be graded as zero "0" by the course coordinator/instructor. Exceptions may be made for the following situations:

If a student has an immediate personal emergency, the student should make every effort to notify the course coordinator or instructor prior to the start of the assessment. If the student is not able to safely make immediate contact, they MUST make contact within 24 hours of the start of the assessment. Personal emergencies are defined as serious vehicle accidents, hospitalizations, serious illness, or physical injuries which require emergency medical treatment or the sudden death of an immediate family member (parent, grandparent, guardian, spouse, child, or sibling of the student). All immediate personal emergencies must be verified in writing with a letter from a health care provider or other appropriate professional familiar with the circumstances.

If a student has a significant pre-scheduled event which conflicts with an assessment, the student must contact the course coordinator or instructor at least two weeks prior to the

examination or quiz to obtain approval for a rescheduled assessment. For holy days, civic procedures, citizenship inter- views, and necessary medical procedures that have been verified by the course coordinator or instructor, approval may be granted.

If the student meets the criteria stated above, make-up assessments will be scheduled by the course coordinator or instructor. Students must contact the faculty on the first day of their return to school to schedule a make-up examination. Make-up examinations may be different from the original format at the discretion of the course coordinator or instructor. For more specific details on this policy, MSPA students should refer to the MSPA Program Student Handbook and OTD students should refer to the OTD Program Student Handbook. PharmD students should refer to the sections on Assessment Policies within this handbook.

Attendance at Experiential Activities

Attendance is MANDATORY. Attendance at the designated experiential site(s) is required to receive credit for the experiential courses. Attendance is a grading criterion as well as a requirement for certification of experiential hours. Please refer to the program specific experiential manual for more de- tails.

Absences—PharmD

If the student in going to be absent from the course/rotation for any reason, the student MUST notify the preceptor and the Office of Experiential Education for pre-approval unless the absence is due to a personal emergency or emergency in the student's immediate family (i.e., patent, grandparent, guardian, spouse, child, or sibling of the student) such as death, hospitalization or other emergency situation; in which case the student MUST notify the preceptor and the Office of Experiential Education immediately.

Failure to notify the preceptor and the Office of Experiential Education will result in the student being reported through the Honor Code Intake form.

Any time missed must be made-up before the end of the designated rotation block in which the student is participating*. Students who do not complete the minimum hours before the end of the course/rotation block will automatically fail the course/rotation. Personal days CANNOT be used for any Experiential Education Experience (IPPEs, Certificate Experience Elective, and/or APPEs).

*If a student is scheduled at a site on a school-observed holiday (i.e. Labor Day, Thanksgiving, etc.), and if the site is open on that holiday, then the student is expected to be on site. However, if the site is closed in observance of the holiday, it is at the preceptor's discretion when the student will be required to make up the holiday (example, the preceptor may request the student to make up the time missed for Labor Day on Friday of that week)

Absences—OTD

Attendance during the experiential phase is mandatory.

If the student is going to be absent from the fieldwork or doctoral capstone experience for any rea- son, the student MUST notify the fieldwork educator/DCE site mentor and the Academic Fieldwork Coordinator/Doctoral Capstone Coordinator for pre-approval unless the absence is

due to a personal emergency or emergency in the student's immediate family (i.e., parent grandparent, guardian, spouse, child, or sibling of the student). An emergency may include death, hospitalization, or other emergency situation. In these circumstances, the student must notify fieldwork educator/DCE site mentor and the Academic Fieldwork Coordinator/Doctoral Capstone Coordinator immediately. For more specific details on this policy, please refer to the OTD Fieldwork and Capstone Manual.

Attendance for Online Courses

Online students are subject to the following attendance policy. Student attendance in an online course is defined as active participation in the course. Participation in this course may take the form of posting to discussion forums, submitting assignments to drop boxes, or completing quizzes or exams. Students need to participate each week in some way to satisfy the attendance requirement. (Note: logging into the course does not qualify as participation and will not be counted as meeting the attendance requirement).

Students can be dropped seven calendar days after the start of the semester if they:

1. Fail to meet the attendance requirement (as defined above) during the first week of class, OR
2. Fail to contact the instructor in the event of a technical problem, OR
3. Fail to contact the instructor during the first week of class regarding their inability to complete either #1 or # 2 above

In addition, any student failing to meet the attendance requirement for more than two consecutive weeks may be sent a "stopped attending" letter. At midterm, the Institute will administratively drop any student who has failed to meet the attendance requirement as set forth by the instructor. After midterm, students who stop participating in a class without officially dropping a class and who are not administratively dropped may receive a grade of "F" for the course. This may also have an impact on certain financial aid awards. It is ultimately the responsibility of the student to drop a course. Any student who can't meet the attendance requirements for a given week should contact their instructor immediately.

Tardiness

Arriving late to class is disruptive to other students and faculty as it interrupts the teaching and learning process. Students arriving late to class without a valid excuse will forfeit any points that may have been earned through quizzes or other activities prior to their arrival to class, unless a valid excuse is submitted and approved by the instructor.

Audit Policy

Students may audit a course only with the permission of the Instructor, Program Director, and Provost and Vice President of Academic Affairs. Faculty may set requirements for students auditing courses that may include class attendance, participation, and other activities. If these requirements are not met, a notation of "AX" will be entered into the student transcript to indicate the course was not completed successfully. A notation of "AU" appears on the transcript when the course is completed successfully. After a grade has been issued, a course may not be changed from letter grade to audit status, or vice versa. An audited class will not be

counted toward degree or certificate credit requirements.

Upon submission and approval of a Course Audit Request, KGI students may be eligible to audit courses to help review coursework when necessary or for personal or professional development.

Non-degree and non-certificate seeking students who wish to audit courses are required to obtain instructor approval and pay the full per-course tuition at $400 per credit.

Canceling Classes

The mission of each of The Claremont Colleges (TCC) states that education is the primary service which each provides to students; therefore, it is the policy of The Claremont Colleges that classes will not be canceled. Only overriding considerations of the most serious kind (safety, health, etc.) may justify interrupting instruction.

Because the Constitution of TCC provides for free cross-enrollment, each member of TCC has an interest in each other member continuing to provide instruction without interruption. Therefore, a member Institution that cancels classes must immediately contact the Chair of the Council of Presidents, the CEO of TCCS, and Campus Safety to inform them of the cancellation.

The structure of various members of TCC is such that there are special considerations for different institutions. For example:

Most instruction at Claremont Graduate University is given in late afternoon or early evening, relatively few students live in Claremont, and many students travel considerable distances to attend classes.

Instruction at Keck Graduate Institute is done on a different daily schedule than for the other member colleges

Cross-enrollment among the five undergraduate colleges is so extensive and complex that it is extremely difficult for all of them if even one of the undergraduate colleges cancels class

Procedure for Canceling Classes

Only a President or Acting President of a member college may cancel classes on a single campus

Any President or Acting President shall inform the member Colleges and may initiate a request to cancel classes on the other campuses by contacting the Chair of the Council of Presidents

Upon receiving notice of cancellation or a request to cancel classes, the Chair of the Council shall convene the Council at the earliest possible time—either by personal meeting or by telephone conference—to discuss the scope, duration, and nature of the interruption, as well as the process for communicating the resumption of classes

If possible, any announcement canceling classes should include a statement about how or when canceled classes will be made up

The Chair of the Council of Presidents bears responsibility for communicating any such interruption at the earliest possible time (and in any case prior to the first canceled class hour) to the following at each of The Claremont Colleges:

- The Office of the President:
- The Office of the Dean of Faculty;
- The Office of the Registrar; and the CEO of TCCS shall also be notified
- Notice shall be given by telephone and by email
- The Council of Presidents should inform students and faculty both by email and by posting the cancellation notice in prominent places (for off-campus students)
- The Registrars' Committee of The Claremont Colleges may be helpful in scheduling makeup times and places, particularly if more than one campus is involved.

This protocol was drafted and adopted by the Council of Presidents of The Claremont Colleges on June 9, 2004.

Change of Program

Students interested in changing their academic program should first consult with the appropriate faculty members and Program Director(s) to discuss their options. In general, a minimum GPA of 3.0 is required to request a program change, and students currently on academic probation are not eligible to apply. In some cases, students may be asked to submit a transcript for departmental review and approval.

To proceed with a program change, students must obtain approval from the following offices:

- Program Director of the current program
- Program Director of the intended new program
- Financial Aid
- Student Accounting
- Office of the Registrar

International students must also receive approval from the International Student Advisor.

To initiate this process, students must complete the Intent to Change Program Form.

Please note: The form must be completed and submitted at least one month prior to the start of the applicable term. Once approved, program changes will take effect in the subsequent fall, spring, or summer term.

Change of Concentration and Declaring Concentration

Students who wish to change or declare their concentration should consult with the appropriate faculty member(s) and Program Director(s) to discuss available options. Approval from the Program Director is required for all changes and declarations.

To initiate this process, students must complete the Concentration Change/Declaration Form. Once submitted, the form will be routed for the necessary approvals.

Commencement Ceremony Participation Policy

Keck Graduate Institute proudly celebrates the achievements of Master's and Doctorate-level graduates during the annual commencement ceremony, held near the end of the Spring term.

Eligibility for Participation for Fall and Spring Graduates
To participate in the ceremony, students must:

- Be on track to complete all graduation requirements by the end of the Fall or Spring term preceding the spring commencement
- Be identified as a Fall Graduate or Spring Expected Graduate by the Office of the Registrar prior to commencement
- Complete and submit an Intent to Graduate Form to confirm participation

The Office of the Registrar will provide Student Affairs, who oversees the ceremony, with the list of eligible students prior to the event.

Exceptions for Summer Graduates
Since KGI holds only one commencement ceremony per year, some students expecting to graduate in the Summer of the same academic year may be allowed early participation in the preceding Spring commencement ceremony if they:

- Are on track to complete all graduation requirements by the end of the Summer term following commencement
- Have 6 or fewer units remaining to complete graduation requirements (Exception may be granted for PhD program)
- Are recommended by their Program Director
- Complete and submit an Intent to Graduate Form to confirm participation

The Program Director must notify the Office of the Registrar of these eligible Summer Graduates at the same time they submit the Spring Expected Graduate list.

Please note:

- Each school and program may have unique requirements.
- Approval for early participation is granted solely at the discretion of the Program Director and the Dean of the school.
- Students approved for early participation in the commencement ceremony (and who attend) are not eligible to participate in the following Spring commencement after their degree is conferred.
- As of Fall 2025, a graduation fee will apply to students who enroll. Any unpaid graduation fees will result in a hold on the student's account, and Student Affairs will be notified. Holds may prevent diploma release and/or participation in the commencement ceremony until fees are paid in full.

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Course Substitution Policy

This policy outlines the circumstances, criteria, and procedures for approving course substitutions within academic programs at KGI. Course substitutions allow a student to meet a specific degree requirement with an alternate course that is deemed comparable in content, rigor, and learning outcomes.

This policy applies only to courses completed at KGI. Courses transferred from other institutions are governed separately under the Transfer Credit Policy.

Circumstances for Course Substitution
Program Directors may request a course substitution on behalf of a student when extenuating circumstances prevent completion of a required course. A course may be considered for substitution under, but not limited to, the following conditions:

- The required course is no longer offered or presents a significant scheduling conflict.
- Changes to the curriculum have altered course availability or program structure, impacting the student's ability to enroll in the originally required course.
- The student has previously completed a KGI course with comparable content and learning objectives, such as in another KGI program.

Criteria for Course Substitution
All proposed course substitutions must meet the following criteria:

- Only courses taken at KGI that are completed with a grade of B (3.0) or higher may be considered for substitution.
- The substituted course must be of equivalent academic level and constitute a fair and reasonable equivalence to the required KGI course.
- The course must logically fit into the program for the degree being pursued at KGI.
- Limitations on the number of substitution credits are determined by the specific academic program.
- Individual programs reserve the right to deny substitution requests for courses deemed outdated or no longer relevant to the discipline.

Procedure for Requesting a Course Substitution
To request a course substitution, the following steps must be completed:

1. The Program Director must complete the Course Substitution Request Form on behalf of the student and obtain approvals from both the student and the Dean.
2. The completed and approved form must be submitted to the Office of the Registrar for final review and processing.

Approved Substitution Coursework
At the discretion of the institution, approved course substitutions may be recorded on the student's transcript and included in GPA calculations.

KECK GRADUATE INSTITUTE
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Credit Hour Policy

Purpose or Overview of Policy

The purpose of this policy is to define the amount of instruction and student work expected for each credit hour (or unit of credit).

Scope of Policy

This policy is intended to reflect the University's commitment to the principles, goals, and ideals by defining KGI's standards of academic credit, and to adhere to federal regulations under Section 600.2 and 600.4, revised July 1, 2020 of the Higher Education Act and 34 CFR 668.8(k) and (l) of the Code of Federal Regulations, and is consistent with the requirements of the WASC Senior College and University Commission (WSCUC). These requirements require the WSCUC to review the institution's definition of credit hour and an institutions' processes and policies for ensuring the credit hour policy is followed.

Policy Statement

Definitions

- KGI's academic year consists of terms in Summer, Fall and Spring, and each term is approximately 15 weeks in length.

- Credit Hour: Except as provided in 34 CFR 668.8(k) and (l), a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:
- One hour of classroom, direct faculty instruction, or other instructional activity and a minimum of two hours of out-of- class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or

- At least an equivalent amount of work as required in paragraph (1) of this definition for other aca- demic activities as established by the institution, including laboratory work, research, internship, practicum, experiential or clinical work, and other academic work leading to the award of credit hours.

- Instructional hours include classroom hours with direct instructor contact in a physical or virtual class- room, as well as asynchronous instructional content for online or hybrid courses. This includes class meeting times for lecture, exams, classroom discussion, and other supervised learning activities, as well as asynchronous self-guided learning activities.
- Non-classroom hours: supervised or non-supervised student work out of class.

- Total work hours: Combined classroom and non-classroom hours. Instructors may reasonably adjust the classroom and non-classroom work hours depending on course and scheduling needs such as holidays and emergencies, but the total work hours must remain consistent.

KECK GRADUATE INSTITUTE
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Credit Hours Policy

In order to be considered full-time for purposes of federal financial aid, graduate students must be enrolled in at least 12 credits per semester. In order to be considered half-time, graduate students must be enrolled in at least six credits per semester.

KGI awards credits in accord with the following criteria: for each 1 credit, a course meets for 1 hour per week in a 15-week semester, as further defined in Section III below. For example, a three-credit course is expected to have a total of 45 contact hours and 90 hours of student work outside of class per semester.

The following examples represent KGI course credit hour calculations:

Credits	Instructional Activities	Non-classroom Hours	Expected Total Work Hours
1.5	22.5	45	67.5
3	45	90	135
6	90	180	270

Credit hours are granted for various types of instruction as follows

- Lecture, Discussion, Recitation Courses

  A credit hour is assumed to be at minimum a 50-minute (not to exceed 60-minute) period. In courses, such as those offered online, in which “seat time” does not apply, a credit hour may be measured by an equivalent amount of work, as demonstrated by student achievement. For example, a three-semester credit hour course may meet for two 80-minute sessions or one 160-minute session per week for fifteen weeks.

- Laboratory Courses

  For a laboratory class, the hours per week spent in the lab are considered to be instructional activities, which may include lab activities such as experimental design, notebook journals, lab meetings, and practice in clinical skills labs. Thus, one unit is three hours per week of laboratory time. Forty-five 50-minute sessions of such activity would normally earn one semester credit hour. Where such activity involves substantial outside preparation by the student, the equivalent of fifteen periods of 100 minutes duration each will earn one semester credit hour.

- Experiential Courses

  When learning takes place in an experiential, clinical or other work setting and is to be credited as a portion of an academic program design, as in an internship, clerkship, or rotation, one semester credit hour will be awarded for each 40 to 45 clock-hour week of supervised academic activity that provides the learning considered necessary for the program.

- Independent Study and Research

  One credit for independent study and research (defined as study given initial guidance, criticism, review and final evaluation of student performance by a faculty member) will be awarded for the equivalent of forty-five 50-minute sessions of student academic activity.

- Short (Intensive) Courses

  Intensive courses are prorated so they contain the same number of hours as if the course were scheduled for a full semester. To maintain the integrity of the instructional program, care must be taken when scheduling these intensive courses so that there is adequate time for students to learn the material, complete homework assignments and assessments, or complete laboratory assignments. The guidelines presented in Section II will be used to calculate semester hour and total work hour equivalents for intensive courses.

- Monitoring and Compliance

  KGI faculty will evaluate the credit hour designations for approved curriculum in regular cycles to coincide with the campus accreditation cycle and through ongoing curriculum and program review processes. No later than one year prior to the submission of the WSUSC reaccreditation documents, each school will be required to provide a certification of all of their approved courses meeting the guide- lines above.

- Credit Requirements

  All full-time students at KGI are required to be enrolled in a minimum of 12 semester credit hours. In order to be considered full-time for purposes of federal financial aid, graduate students must be enrolled in at least 12 credits per semester. (The one exception is the PhD program: to be considered full-time, PhD students must be enrolled in 15 semester credits per term). To maintain full-time status, and to comply with federal guidelines, more than 50% of all earned academic credit must be completed in coursework where “seat-time” does apply. In order to be considered half-time, graduate students must be enrolled in at least six credits per semester and obtain permission prior to the start of the semester from the Dean.

KGI awards credits in accordance with the following criteria: for each 1 credit, a course meets for 1 hour per week in a 15- week semester, as further defined below. For example, a three-credit course is expected to have a total of 45 classroom hours and 90 hours of student work outside of class per semester.

KGI is on the semester system. Each semester or term is approximately 15 weeks. Course credit hour calculations are based on a 15- week semester.

For all KGI courses bearing academic credit, the “semester credit hour” is defined using the Carnegie Definition as “the amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably ap- approximates not less than.

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Cross Registration Policy

KGI students may request permission to enroll in courses at Claremont Graduate University (CGU), including the Drucker School of Management. Approval is granted at the discretion of both the KGI Program Director and CGU instructor, and depends on course capacity and enrollment is not guaranteed.

Cross-Registration Process:

1. Identify the desired CGU course (including Drucker School offerings) at Claremont Graduate University .
2. Complete the Cross-registration Form with course details and secure approval from the KGI Program Director.
3. Forward the approved form to the CGU instructor for final approval.
4. Submit the completed form back to the KGI Registrar's office at registrar@kgi.edu.
5. Within 2–3 business days, the KGI Registrar will notify you of the enrollment outcome. Enrollment is not automatic and depends on course approvals and seat availability. If approved, KGI will handle communication with the CGU Registrar's Office to complete student registration, which is necessary for accessing course materials.

Important: If you need to drop a cross-registered course, you must notify the KGI Registrar before the KGI add/drop deadline. Failing to do so may result in a grade or withdrawal from the course.

Restrictions on Undergraduate Cross-Registration

- KGI students are not permitted to cross-register for undergraduate courses at any of the other Claremont Colleges (Claremont McKenna, Harvey Mudd, Pitzer, Pomona, or Scripps).
- If you wish to request an exception to the above policy, please complete and submit an Academic Petition Form to the KGI Office of the Registrar.

Undergraduate Summer Science Courses

- KGI does not offer cross-registration during undergraduate summer science sessions and students from the Claremont Colleges may not cross-register in these courses.
- KGI offers undergraduate-level summer science courses that require separate tuition payment.
- The application deadline is one week before the course begins, though courses fill on a rolling basis and may close before that deadline.
- Each class may be cancelled if minimum enrollment is not met. All enrolled students are responsible for applicable tuition and fees.

Dean's List

Henry E. Riggs School of Applied Life Sciences
Full-time students enrolled in the Henry E. Riggs School of Applied Life Sciences who achieve a term GPA of 3.900 or higher will be recognized on the Dean's List at the conclusion of each academic term in acknowledgment of their outstanding academic performance.

Graduates who achieve Dean's List recognition each term throughout their studies will be honored with an overall Dean's List distinction, highlighting their consistent dedication to academic excellence. Eligibility for this recognition is assessed at the end of the fall semester prior to commencement.

School of Health Sciences
Full-time students enrolled in the School of Health Sciences who achieve a cumulative GPA of 3.900 or higher will be recognized on the Dean's List at the conclusion of each academic term in acknowledgment of their outstanding academic performance.

Graduates who achieve Dean's List recognition each term throughout their studies will be honored with an overall Dean's List distinction, highlighting their consistent dedication to academic excellence. Eligibility for this recognition is assessed at the end of the fall semester prior to commencement.

School of Pharmacy
Full-time students enrolled in the School of Pharmacy who rank in the top 10 percent of their respective class based on cumulative GPA will be recognized on the Dean's List at the conclusion of each academic term in acknowledgment of their outstanding academic performance.

Graduating students in the Doctor of Pharmacy program who demonstrate exceptional academic achievement may also be eligible for Latin honors (Summa Cum Laude, Magna Cum Laude, and Cum Laude). Eligibility for these honors is determined based on official cumulative GPAs of all expected graduates at the end of the fall semester prior to commencement. Graduates who rank in the top five percent, top ten percent, and top twenty percent of their class and who do not qualify for a higher designation—will be awarded Summa Cum Laude, Magna Cum Laude, and Cum Laude, respectively.

Dissertation Completion Enrollment Policy (REF7010)

Incomplete Dissertation After Initial Graduation Date
Students who have completed all required PhD coursework and research, but who have not yet completed the writing of their dissertation or successfully defended it, are required to enroll in RES 7010 (0 credits) until the dissertation is successfully defended.

Key policy provisions are as follows:

- Enrollment Requirement: Students must remain enrolled in RES 7010 (0 credits) until successful dissertation defense and completion of the course with a grade of "P" (Pass).
- Graduation Status: Graduation will be delayed in these cases. The doctoral degree will not be conferred until RES 7010 is successfully completed.
- Dissertation Defense Deadline: PhD students must successfully defend their dissertation no later than two (2) weeks prior to the graduation date, as specified in the Academic Calendar.
- Grading and Re-Enrollment:
    - Students who do not successfully complete RES 7010 in a given term will receive a grade of "NP" (No Pass).
    - Students will be re-enrolled in RES 7010 each term until successful completion.

    - A maximum of three (3) attempts is permitted in order to comply with Satisfactory Academic Progress (SAP) requirements, including the 150% maximum time-to-completion standard. *Please note that in certain cases, a student may be permitted fewer than three attempts based on individual SAP limit*s.
- An extension beyond three (3) terms of enrollment in RES 7010 may be granted only under exceptional circumstances and requires approval by the PhD Program Committee. Requests for extension must be submitted in writing and remain subject to institutional SAP and maximum time-to-degree policies.
- Enrollment Status (Institutional): Students enrolled solely in RES 7010 (0 credits) will be considered “Active” for KGI internal records.
- Enrollment Status (External Reporting): For compliance and reporting purposes, the Office of the Registrar will report these students as “Withdrawn” or “Less Than Half-Time” to the National Student Clearinghouse (NSC) and the National Student Loan Data System (NSLDS), as no credit hours are associated with this enrollment.
- Tuition: No tuition will be charged for enrollment in RES 7010 (0 credits).
- Continuation of any stipend, fellowship, or assistantship during enrollment in RES 7010 is contingent upon the availability of funds, compliance with funding source requirements, and fulfillment of any associated duties. Such support is subject to review and approval by the PhD Program Director in consultation with the PhD Program Committee.

Family Educational Rights and Privacy Act (FERPA)

Family Educational Rights and Privacy Act (FERPA) is a Federal law administered by the Family Policy Compliance Office of the U.S. Department of Education: 20 U.S.C. § 1232g; 34 CFR Part 99.

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. (An “eligible student” under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution at any age.) In compliance with FERPA, students at Keck Graduate Institute (KGI) are assigned the following four rights in regard to education records maintained by KGI:

The right to inspect and review the student's education records within 45 days after the day Keck Graduate Institute receives a request for access. A written request that identifies the record(s) the student wishes to inspect is required. The school official will make arrangements for access and notify the student of the time and place where the records may be inspected. Education records are defined as records in any format that directly identify the student and are maintained by the various offices of KGI. Some records may be administered by additional privacy laws and regulations that supersede FERPA, and, therefore, may not be available under this policy. Requests for the inspection and review of education records must be submitted directly to the custodian of the record, following the policy and procedure of the office whose custody the record is kept. If in doubt or unsure of the custodian of the record, please contact the Office of the Registrar at Registrar@kgi.edu or (909) 607-0109.

The right to request the amendment of the student’s education records that the student believes is inaccurate, misleading, or otherwise in violation of the student’s privacy rights under FERPA.

A student who wishes to ask Keck Graduate Institute to amend a record should write the

school official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. In compliance with KGI's policy, individual offices have established procedures for challenging the content of education records. Under FERPA, grades are exempt from this provision. Students with concerns about individual grades should refer to the Academic Policy Manual and may contact the Program Director or Office of the Registrar.

If Keck Graduate Institute decides not to amend the record as requested, Keck Graduate Institute will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The right to provide written consent before Keck Graduate Institute discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes dis- closure without consent.

Students may request that KGI restrict the release of directory information by completing an Authorization to Withhold Directory Information form. Please contact the Office of the Registrar at Regis- trar@kgi.edu or (909) 607-0109 for further information. Such restrictions will remain in effect until cancelled in writing by the student. Students may declare themselves to be tax dependents of their parents and authorize KGI to release non-directory information to parents. Such authorizations will remain in effect until cancelled in writing by the student.

Keck Graduate Institute discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official typically includes a person employed by the Keck Graduate Institute in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the board of trustees; or a student serving on an official committee, such as a disciplinary or grievance committee. A school official also may include a volunteer or contractor outside of the Keck Graduate Institute who performs an institutional service of function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent or a student volunteering to assist another school official in performing his or her tasks. A school official typically has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for Keck Graduate Institute.

The right to file a complaint with the U.S. Department of Education concerning alleged failures by Keck Graduate Institute to comply with the requirements of FERPA. The name and address of the office that administers FERPA is:

Student Privacy Policy Office

U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202

See the list below of the disclosures that postsecondary institutions may make without consent.

FERPA permits the disclosure of PII from students' education records, without consent of the

student, if the disclosure meets certain conditions found in § 99.31 of the FERPA regulations. Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, dis- closures of directory information, and disclosures to the student, § 99.32 of FERPA regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures. A postsecondary institution may disclose PII from the education records without obtaining prior written consent of the student —

- To other school officials, including teachers, within Keck Graduate Institute whom the school has determined to have legitimate educational interests. This includes contractors, consultants, volunteers, or other parties to whom the school has outsourced institutional services or functions, provided that the conditions listed in § 99.31(a)(1)(i)(B)(1) - (a)(1)(i)(B)(3) are met. (§ 99.31(a)(1))

- To officials of another school where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student's enrollment or transfer, subject to the requirements of § 99.34. (§ 99.31(a)(2))

- To authorized representatives of the U. S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or State and local educational authorities, such as a State postsecondary authority that is responsible for supervising the university's State-supported education programs. Dis- closures under this provision may be made, subject to the requirements of §99.35, in connection with an audit or evaluation of Federal- or State- supported education programs, or for the enforcement of or compliance with Federal legal requirements that relate to those programs. These entities may make further disclosures of PII to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation, or enforcement or compliance activity on their be- half. (§§ 99.31(a)(3) and 99.35)

- In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. (§ 99.31(a)(4))

- To organizations conducting studies for, or on behalf of, the school, in order to: (a) develop, validate, or administer predictive tests; (b) administer student aid programs; or (c) improve instruction. (§ 99.31(a)(6))

- To accrediting organizations to carry out their accrediting functions. (§ 99.31(a)(7))

- To parents of an eligible student if the student is a dependent for IRS tax purposes. (§ 99.31(a)(8))

- To comply with a judicial order or lawfully issued subpoena. (§ 99.31(a)(9))

- To appropriate officials in connection with a health or safety emergency, subject to § 99.36. (§ 99.31(a)(10))

- Information the school has designated as "directory information" under § 99.37. (§ 99.31(a)(11))

- To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of § 99.39. The disclosure may only include the final results of the disciplinary pro- ceeding with respect to that alleged crime or offense, regardless of the finding. (§ 99.31(a)(13))

- To the general public, the final results of a disciplinary proceeding, subject to the requirements of § 99.39, if the school determines the student is an alleged perpetrator of a crime of violence or non- forcible sex offense and the student has committed a violation of the school's rules or policies with respect to the allegation made against him or her. (§ 99.31(a)(14))

- To parents of a student regarding the student's violation of any Federal, State, or local law, or of any rule or policy of the school, governing the use or possession of alcohol or a controlled substance if the school determines the student committed a disciplinary violation and the student is under the age of 21. (§99.31(a)(15))

Directory Information further defined by FERPA and KGI

In compliance with FERPA, Keck Graduate Institute has designated the following items of information as directory information: name and student user name; local and permanent address; local, cellular, and permanent phone number; e-mail address; date and place of birth; major field of study; dates of attendance; enrollment status; degrees and awards received; most recent previous institution at- tended; photographs; participation in officially recognized activities. Directory information is defined as information that would not generally be considered harmful or an invasion of privacy if released.

Unless restricted by the written request of a student, KGI may release directory information without the prior consent of a student. Directory information required for course or classroom participation in courses may not be withheld from faculty and students connected with the particular course. Information that is not directory information is non-directory information and, except where permitted by FERPA, requires the prior written consent of the student for release.

Keck Graduate Institute will notify all registered students annually of their FERPA rights at the beginning of the academic year through email and through the publication of KGI Policies, which is available on the KGI website.

Sources for further information

For further information from the United States Department of Education, please visit its website: http://www.ed.gov/

Additionally, you can find detailed FERPA information at: http://www2.ed.gov/pol- icy/gen/guid/fpco/ferpa/index.html

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Grading

The grading and assessment of student performance is a critical part of the educational process and is taken very seriously at KGI. There is a wide range of course formats, project requirements, and presentation requirements that require different means of assessment. While the form may vary, the faculty are responsible for reporting on the performance of each student enrolled in a course. Only courses in which A, B, C, or Pass are earned may be counted in satisfaction of degree or certificate requirements. Only KGI courses will be considered in determination of the student's academic standing.

Standard Grading Basis

The Institute is on a 4-point grading system. The following grade notations are used in calculating the Grade Point Average (GPA). A student's GPA is calculated by dividing the total number of grade points earned by the total number of credits attempted.

A		B		C		F	
A	4.0	B+	3.3	C+	2.3		
A-	3.7	B	3.0	C	2.0	F	0.0
		B-	2.7	C-	1.7		

P/NP = Pass/No Pass. Selected. Courses only, not included in the GPA calculation.
For PharmD students, grades of A+, and C- are not applicable.
For MSPA program students, grades of A+/-, B+/-, and C+/- are not applicable.
For OTD and MSGC program students, grades of C- are not applicable

Transcript Key

I – Incomplete (Note: requires an Incomplete Contract that must be filed with the Office of the Registrar)

AU/AX – Audit

W – Withdrawal (Excused or voluntary withdrawal from a course)

WF – Withdrawal—Fail (Unexcused failure to complete other course requirements including attendance, papers, etc. or resolve an Incomplete during the allotted time).

Grades Not Calculated in GPA

AU/AX – Audit

P – Pass

NP–No Pass

W – Withdrawn (student withdrew after drop deadline)

I – Incomplete

R - Repeat

Additional note for PharmD students: The Introductory Pharmacy Practice Experiences (IPPEs) are not counted in the GPA calculation.

School Codes of The Claremont Colleges

If a course has a three-letter suffix, the course was taken at a different college or school within The Claremont Colleges:

Claremont Graduate University – CGU

Claremont McKenna College – CMC

Harvey Mudd College – HMC

Pitzer College – PIT

Pomona College –POM

Scripps College – SCR

Repeating Courses

Any student may, with the consent of the course instructor and the Dean, repeat a course in which they received a grade of F or No Pass. In addition, only the most recently received grade shall be used in calculating a student's grade point average and total credits required for completion of the degree or certificate. All units attempted and grades received shall remain part of the student's permanent record. Any repeated course, except for one offered only on a P/NP basis, must be taken for a letter grade (A, B, C, and F). Additional tuition fees may apply.

Grade Change Policy

Purpose
This policy outlines the procedures and responsibilities related to the changing of final course grades. It ensures that grade changes are handled fairly, consistently, and with appropriate oversight.

Policy Overview
Final grades are considered permanent once submitted. A change to a final grade may only occur when there is clear, documented justification. Acceptable reasons for grade changes include, but are not limited to the following:

- Instructor error in calculation or data entry
- Completion of previously incomplete coursework (e.g., removal of an "I" grade)
- Discovery of missing work that was submitted on time
- Correction of a clerical or administrative error

Procedure for Grade Changes
If a grade change is necessary, the following steps must be followed:

1. The course instructor must initiate the grade change request. If the original instructor is unavailable (e.g., no longer employed), the Program Director or Dean may conduct a review and authorize the change.
2. The instructor must complete a Grade Change Form and obtain approvals from the Program Director and Dean.
3. The Grade Change Form must be submitted to the Office of the Registrar for final processing.
4. Grade change requests must be submitted within 90 days of the original grade posting date. Exceptions may be granted in cases of documented extenuating circumstances (e.g., medical or personal emergencies) subject to the Dean's approval.

Incomplete Grade
If a student was assigned an "I" (Incomplete) grade, the instructor must submit a Grade Change Form once the student had completed the required coursework. Please refer to the Incomplete Grade Policy for deadlines and additional guidance.

Grade Appeal
Students who believe a grade was assigned in error or unfairly may submit an appeal to the course instructor. If a grade change results from a successful appeal, it must follow the same approval and documentation procedures outlined above.

Honor Code

Statement of Philosophy
We, the KGI community, strive for the highest ethical standards and will hold one another accountable to them. We will abstain from improper conduct in our academic and professional lives, ensuring that our successes come only from just and ethical means.

General Principles Inherent in the Honor Code

a. Students shall treat all members of the community with respect and without malicious intent to ensure that all students share equal opportunities.
b. Students shall conduct themselves in a manner that upholds their reputation of honesty and integrity in order to promote an environment of trust.
c. It is the obligation of the students to participate in making the honor system viable by reporting violations of potential academic and professional misconduct.
d. KGI students shall report any firsthand knowledge of any violation to any of the provisions of this Honor Code.

Prohibited Activities with Respect to Academic Matters
Please refer to the Academic Integrity section of this catalog for information related to prohibited activities with respect to academic matters.

Prohibited Activities with Respect to Non-Academic Matters
Please refer to the Student Handbook for information related to prohibited activities with respect to non-academic matters.

Honor Code Procedures
Please refer to the Academic Integrity section of this catalog for information related to KGI Honor Code procedures with respect to academic matters. Please refer to the Student Handbook for information related to KGI Honor Code procedures with respect to non-academic matters.

Incomplete Grade Policy

A grade of Incomplete ("I") may be assigned when a student's coursework is of passing quality, but they are unable to complete the course due to circumstances such as illness, a personal emergency, or other factors beyond their control, and after the drop or withdrawal deadline has passed. Students should carefully consider all factors before requesting an Incomplete and should consult the academic calendar for relevant deadlines.

An "I" grade is appropriate only when all but a minor portion of the coursework has been completed satisfactorily. The student must make arrangements with the instructor to receive the Incomplete before the end of the course. The instructor must also submit an "Incomplete Contract" on behalf of the student. Generally, the student must complete the outstanding coursework within four weeks after the end of the semester, unless otherwise agreed upon by the instructor. If the student fails to meet the agreed-upon deadline, the instructor will assign the grade that reflects the student's progress in the course, as specified in the Incomplete Contract.

Once the coursework is completed, the instructor will submit the final grade to the Office of the Registrar for processing using the Grade Change Form.

In certain circumstances, the time limit for completing the coursework may be extended if a petition is submitted and approved by the dean before the specified deadline. Under no circumstances should students re-enroll in the course to remove an "I" grade.

International Students – Graduation Date & I-20 Extension Policy

International students studying in the United States under F-1 status must maintain a valid I-20 document at all times. If an academic program cannot be completed by the graduation date listed on the I-20, students must request an extension at least 30 days prior to the end date. Please note: extensions cannot be processed after the program end date has passed.

Both faculty and students are encouraged to monitor academic progress early in the term. If a student appears unlikely to complete requirements by the original program end date, the student must take initiative to request an I-20 correction as soon as possible.

Timely action also supports post-graduation planning. F-1 students may apply for Optional Practical Training (OPT) up to 90 days before and up to 60 days after their I-20 program end date. Students are strongly advised to confirm their program end date well in advance to ensure they remain in compliance and to allow time for the OPT application process, if applicable. For questions related to OPT, students should contact the International Student Advisor at international@kgi.edu.

This policy outlines the required steps for requesting a graduation date and I-20 extension in compliance with U.S. immigration regulations.

Procedure

1. Consult with the Program Director
    - Meet with the Program Director or Advisor to discuss academic progress.
    - If an extension is deemed necessary, the Program Director will determine a new graduation date and provide it to the student for use in the extension request process.
2. Coordinate with the International Student Advisor
    - Contact the International Student Advisor to initiate the I-20 extension request.
    - Once the request is approved, the student can proceed to the next step.
3. Complete the Graduation Date Extension Form
    - Fill out the Graduation Date Extension form.
    - Obtain required approvals from the following offices:
        - International Student Advisor
        - Program Director
        - Financial Aid
        - Student Accounts
        - Dean
4. Submit Final Documentation
    - Submit the completed and approved form to the Office of the Registrar.
    - The Registrar will notify all relevant departments of the revised graduation date.

Intellectual Property Rights

This Intellectual Property (IP) policy addresses rights to patentable inventions, tangible research property, software, trademarks and copyrightable works, including educational materials and electronic media, collectively termed “technology”, that have been made or created by faculty, students, and staff at KGI. It also incorporates related policies regarding trade secrets, consulting, conflicts of interest, and research agreements. Student Inventors collaborating with faculty or companies, as in a Team Masters Project (TMP), should consult with the faculty member, principal investigator or TMP director. The complete policy appears in the KGI Operational policies and KGI Graduate Faculty Handbook, with excerpts as follows:

All faculty, staff and students at Keck Graduate Institute including, without limitation, visiting faculty, fellows and students, who participate in research sponsored by governmental or industrial entities or by non-profit foundations or in KGI-funded research or who use significant funds or facilities administered by KGI must sign an “Invention and Proprietary Information Agreement” (IPIA). Under this agreement, when a work is created that uses substantial KGI funding or facilities, KGI retains all rights to associated IP unless the President (or designee) waives such rights in writing. The IPIA requires KGI inventors to assign to KGI or (in some cases) to another party as required by law, title to any IP created through the use of such funds or facilities unless otherwise agreed. An IPIA shall be signed prior to employment or enrollment at KGI, and no KGI affiliate can participate in research at KGI facilities until such agreement is signed. If the IP generates net income to KGI, student inventors have the potential to share in that income under the same policies that apply to faculty and staff; to obtain specific details about the royalty allocation procedure, please contact TTO@kgi.edu.

In some cases, KGI does not own a student’s work, as with a work of fiction written without use of KGI resources. If you have any questions about KGI’s IP policies, please contact TTO@kgi.edu.

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Intellectual Property & Technology Transfer

The Intellectual Property & Technology Transfer Committee oversees IP and commercialization activi ties at KGI. If you have questions about whether you may be an inventor, or need guidance on whether you should file a provisional patent prior to a poster presentation or publication, please con- tact the IPTT Committee. IPTT@KGI.edu

Leave of Absence Policy

Purpose
Students may request a leave of absence for medical reasons, serious personal issues, pregnancy, or military deployment. This policy outlines eligibility, documentation requirements, the approval process, conditions, and guidelines for returning to KGI.

Eligibility & Required Documentation:

- Medical leave: Requires a letter from a physician, licensed medical provider, or treating mental-health professional, stating the condition and estimated recovery duration.
- Military leave: Reservists or National Guard members called to active duty must notify their Program Director and the Registrar's Office before deployment, submitting copies of deployment orders via fax, mail, or hand-delivery.
- International students: Must consult the International Student Advisor to understand any immigration implications.

Procedure for Leave of Absence

1. Complete a Leave of Absence form and secure approvals from your Program Director, Financial Aid, Student Accounts, and Dean who will determine eligibility and return conditions.
2. Submit the completed form to the Office of the Registrar, which will notify relevant departments.

It is the student's responsibility to keep KGI updated with any address or circumstance changes during the leave.

Duration & Extensions

- Standard leave duration is up to two academic semesters.
- Requests for extensions must be submitted before the original return date.
- Leaves may be extended up to one additional year max and only under exceptional circumstances, with Academic Dean approval.

Conditions of Leave
Leaves are granted subject to the following conditions:

- Students on academic probation may only take leave for serious medical reasons with Academic Dean approval.
- A leave cannot be granted if the student is already withdrawn.
- After week eleven of a semester, leave is approved only for medical or military reasons.

- Students receiving financial aid must meet with a financial aid counselor before applying.
- Students who do not return by the leave of absence return date will be administratively withdrawn and must reapply through the readmissions process.
- Leaves longer than six months may trigger immediate loan repayment—students should consult financial aid with questions.

Military Deployment During Semester
If deployment occurs mid-semester:

- Excuse tuition for that semester; any payment made will be credited to the student's account
- Course registration is removed so that no penalization occurs due to active obligation.
- For deployments late in a term, the student and faculty may negotiate Incomplete (I) grades; tuition in these cases will not be waived.

Reinstatement
Please refer to the Readmission & Reinstatement Policy for detailed procedures regarding reinstatement after a leave of absence.

Legal Name Change Policy

Students requesting a legal name change must submit appropriate supporting documentation. Requests may include changes to the first, middle, or last name, suffix, or the sequence of names.

Acceptable documentation includes an original or certified copy of one of the following:

- Government-issued photo identification (e.g., driver's license, state ID card, valid passport)
- Birth Certificate
- Marriage Certificate
- Court order indicating the name change
- Divorce decree reflecting the name change
- Certificate of naturalization or permanent resident card (Green Card)
- Documentation of Common Law Marriage or Civil Union

Students may also request to have their student ID Card reissued to reflect their legal name change. The original ID must be returned to receive the replacement. Upon notification, the Office of the Registrar will communicate this request to the Claremont Connection Office.

Please note documentation is not required for minor changes such as adding or removing a hyphen, space, apostrophe, or abbreviating a middle name to an initial.

To request a legal name change, students must complete and submit the Legal Name Change Form to the Office of the Registrar.

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Preferred Name Policy

KGI supports the use of preferred names and recognizes the importance of affirming a student's identity. While we strive to honor preferred names wherever possible, certain institutional systems and official records such as student accounts, financial aid, and transcripts—require the use of a legal name.

At this time, a student's preferred name can be reflected in the following places:

- Empower Student Portal
- Class Rosters
- Attendance Rosters
- Email Display Name (Not the User ID)

Students may also request to have their student ID Card reissued to reflect their Preferred name. The original ID must be returned to receive the replacement. Upon notification, the Office of the Registrar will communicate this request to the Claremont Connection Office.

Please note that preferred names are not used on official documents such as academic transcripts, enrollment verifications, or financial aid records, which require a legal name.

To add a preferred name to the applicable systems, students must complete and submit the Preferred Name Form to the Office of the Registrar.

Preferred Name on Diploma and Commencement Materials
As commencement approaches and students are identified as expected graduates, they will be asked to complete an Intent to Graduate Form. On this form, students may indicate whether they would like their legal name or preferred name to appear on their diploma/certificate and in the commencement program.

Housing
Questions about requesting a preferred name in the housing process may be directed to the Leasing Office at leasing@liveoasisca.com or by phone at (213) 444-8235.

Readmission and Reinstatement Policy

Readmission Through the Office ff Admissions
Readmission for Students Who Have Withdrawn from the Program
Students who voluntarily withdraw or are administratively withdrawn from their program and are in good academic standing (i.e., not on academic probation) must reapply through the formal readmission process for consideration.

To begin this process, students must contact the Office of Admissions by the following deadlines:

- Fall Semester: July 1
- Spring Semester: November 1
- Summer Semester: March 1

Readmission for Students Who Do Not Return from an Approved Leave of Absence
Students who fail to return following an approved Leave of Absence will be administratively withdrawn and must reapply through the readmission process. To initiate this process, students must contact the Office of Admissions by the applicable deadline listed above.

Reinstatement Through the Office of the Registrar
Reinstatement for Students Returning from Academic Delay or Suspension
Students returning from an academic delay or suspension must complete the reinstatement process, which includes submitting a Reinstatement Request Form and receiving approval from the following:

- Program Director
- Dean
- Financial Aid Office
- Student Accounts
- Office of the Registrar

To initiate the reinstatement process, students must contact the Office of the Registrar by:

- Fall Semester: July 1
- Spring Semester: November 1
- Summer Semester: March 1

Reinstatement for Students Returning from a Leave of Absence
Students returning from an approved Leave of Absence must submit a Request to Return from Leave of Absence form and complete the reinstatement process, which includes review and approval from the same departments listed above. Students should contact the Office of the Registrar by the applicable semester deadline above to initiate the process.

Supporting documentation may be required for return from leave of absence requests; this may include permission from the Dean of the school, medical releases, or other supporting documents.

Upon returning from a leave of absence, students should meet with their program advisor to ensure appropriate selection of courses and make arrangements for registration with the Office of the Registrar.

Registration and Enrollment

To be considered registered, a student must be enrolled in coursework, pay tuition and fees, and complete required items for the semester. A student is considered non-registered if they have not enrolled, have not paid tuition and fees, or have not completed the required items. The Institute holds each student fully responsible for checking the accuracy of their initial registration and any subsequent changes submitted to the Office of the Registrar for assuring that the Registrar is provided with a correct address, and for carefully reviewing the status of registration report on the student portal to make sure that it accurately reflects their registration. Students should take prompt steps to eliminate any discrepancies. Students should keep a copy of any petitions or forms that have been submitted to the Registrar's office.

Students must register every semester if they are regular or part-time. KGI policy requires

continuous registration for students from the first semester of enrollment in a program until completion of the degree or certificate. Non-registered students include those who are on leave from the Institute. This category also includes students who have withdrawn from KGI.

Full-Time Status

KGI's definition of full-time status may differ from that for federal financial aid eligibility. If a student requires financial aid, they must meet the federal higher education enrollment standards for financial aid eligibility.

A graduate or professional student is considered a full-time student if enrolled in a minimum of 12 credits for the semester. A PhD student is considered a full-time student if enrolled in a minimum of 15 credits for the semester.

Students will only be considered full time if they are continuously enrolled for at least two consecutive semesters annually. The following considerations also apply:

- Students enrolled in doctoral research are considered full time
- All graduate students who are in Dissertation Continuation may be considered full time
- Students who are engaged in an "internship" experience as part of their degree requirements may be considered full time at the discretion of Academic Affairs
- International students must maintain full-time status to be in compliance with Visa regulations. They should consult with the International Student Advisor if they have questions about their individual status. Note that timely registration for courses is especially important so that they may remain in compliance with Visa regulations.

Part-Time Status

Graduate students may apply for part-time status through the Academic Dean. Doctoral students who have advanced to candidacy are not eligible for part-time status.

Adding/Dropping

Add/drop dates will be listed on the academic calendar.

Riggs School: Adding and dropping courses prior to the deadlines are accomplished online through the student portal or through the online add/drop form on the Registrar's webpage found here.

Course adds/drops are generally not allowed for required courses in the MSGDA program. Students should consult with the Program Director before making any changes. They may be considered for elective courses, which will be in the second year.

School of Health Sciences: Course adds/drops are generally not allowed for required courses in the MSGC, MSPA, and OTD programs. Students should consult with the Program Director before making any changes.

School of Pharmacy: Course adds/drops are generally not allowed for required courses in the PharmD program. Students should consult with the Program Director before making any changes. They may be considered for elective courses, which will be in the P-3 or P-4 year for PharmD students. Changes to electives should be discussed and approved by the Office of Experiential Education (if applicable) and the Academic Dean. All changes to the student's registration will be communicated to the registrar by the Program Director or Coordinator.

Late Registration

It is important to enroll, register, and pay fees in a timely manner to avoid any financial implications. Registration deadlines fall towards the end of the prior semester and are based on a well-publicized billing cycle. Students who are not paid in full will not be admitted to class.

Student Portal

KGI students have access to Empower, their student portal, by clicking here.

If a student has questions about registration, please contact the Office of the Registrar registrar@kgi.edu.

Satisfactory Academic Progress

SAP monitors your academic progress in three categories: GPA, Pace of Progress and Maximum Time Frame. SAP is evaluated at the end of every semester once grades have been finalized and posted.

For a student to progress successfully through the program, the student must maintain good academic standing (>70% or passing all courses), maintain the requisite minimum GPA, complete required coursework in the appropriate sequence, and meet the time-to-completion requirement of 150% of the allocated time for the program. High academic standards are critical to ensuring aca- demic integrity and quality at KGI. The Student Progression Committee (SPC) will review student progression each semester.

The progression committee will communicate a recommendation to the respective academic dean, who will communicate a decision to the student via email and mail. Students placed on academic probation may appeal the decision to the Provost within 5 business days. The appeal must include significant extenuating circumstances impacting academic performance with accompanying documentation. Decision of the Provost in response to the appeal is final.

Students placed on academic probation are required to work with Academic Affairs and the Division of Student Affairs to develop a suitable plan to make every effort to ensure adequate academic progress in the subsequent semester.

International students on probation or subject to dismissal must consult with the international student advisor to understand the implications to internship, work and residency requirements. International students are subject to federal regulations and academic probation and dismissal may impact their immigration status and the ability to remain and work in the U.S., including the ability to complete an internship and may impact Optional Practical Training (OPT) eligibility.

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Satisfactory Academic Progress – Financial Aid

Federal law and regulations require that students receiving financial assistance from federal funds must maintain satisfactory academic progress. The measures used to determine satisfactory academic progress include both the Qualitative Progress (GPA) and Quantitative Progress (timely completion of course credits) which are reviewed after each term. The following policy presents the standards adopted by Keck Graduate Institute for students receiving financial aid.

Students on academic probation will be issued a Financial Aid Warning, which stipulates that failure to make Satisfactory Academic Progress (SAP) after the end of the probation term will result in the suspension of future federal student aid eligibility. Students who fail to make SAP after their probation term that want to receive Federal Student Aid will be required to submit an appeal explaining why they failed to meet SAP standards and how they plan to meet SAP standards in future terms. Stu- dents failing SAP are also required to obtain an academic plan from their program director stipulating that they can finish their degree requirements within the allowed time frame for their program.

SAP Status	Description	Action Options	Financial Aid Status
Meet SAP	You meet all SAP standards	No action required	Eligible for aid
Warning	You did not meet one or more of the SAP standards after a semester of Meets SAP	No action required. "Warning" status is for next semester of enrollment	Eligible for aid
Not Meets SAP (Financial Aid Disqualified)	You did not meet one or more of the SAP standards (GPA, Pace) after a Warning semester OR you have exceeded the maximum time frame	Submit an appeal OR continue to enroll without aid to improve SAP status.	Not eligible for aid
Probation (Financial Aid Probation)	SAP appeal approved.	"Probation" status for next semester of enrollment	Eligible for aid
Not Meets SAP (After Probation Semester)	You did not meet one or more of the SAP standards (GPA, Pace) after your Probation semester.	Submit an appeal which includes an academic plan Or continue to enroll without aid to improve SAP status.	Eligible for aid

Henry E. Riggs School of Applied Life Sciences (Riggs School)

Riggs School students are required to maintain a minimum cumulative GPA of 3.0 each semester determined from grades received in KGI courses. In addition, students must pass required elements of pass/no pass courses or milestones. A minimum 3.0 GPA is also required to transfer to another pro- gram within Riggs. Students obtaining a GPA below 3.0 (or below 2.5 for PPA/PPC) are in jeopardy of not progressing successfully through the program and are expected to work with faculty, teaching assistants, tutors, and Student Affairs to ensure they avail themselves of every opportunity to succeed.

Failure to meet this standard will result in academic probation. Students on academic probation are given one semester to raise their cumulative GPA to 3.0. Students obtaining a GPA below the mini- mum standard for their program will be unable to take more than 18.0 credits per semester.

If a student is dismissed at the end of spring semester, they may complete an internship at the Dean's discretion, but not as a KGI student. International students should note that terms of their internship are subject to federal regulations and academic probation and dismissal may impact their immigration status; students in this situation must consult with the International Student Advisor.

Students obtaining a GPA below 3.0 are in jeopardy of not progressing successfully through the program and are expected to work with faculty, teaching assistants, tutors, and Student Affairs to ensure they avail themselves of every opportunity to succeed.

Academic Progression Expectations | MSGDA

All students in the MSGDA program will be required to maintain a GPA of 3.0 or higher and pass all courses in each semester to progress to the next semester. Students will have an opportunity to ex- plain any special circumstances to the Student Progression Committee (SPC). Based on the review of the student's performance, the Committee will make a recommendation to the Dean for a remediation plan, placement on probation, or withdrawal from the program.

Students who have failed one course in the semester will have the opportunity to remediate the course prior to the beginning of the next semester by working with the course coordinator. The course coordinator will develop a remediation plan that will be an abbreviated program of re-study designed to meet the needs of the student who is repeating the course. The remediation plan will be sent to the program director for approval. Remediation may include retaking of the examinations, re- writing of papers, or completing special projects to demonstrate proficiency in the course. Students failing two or more courses in a semester will either repeat the courses the next time the courses are available or be withdrawn from the program.

School of Health Sciences (SHS)

SHS students are required to maintain a cumulative GPA of 3.0 each semester determined from grades received in KGI courses. Failure to meet this standard will result in academic probation. Students on academic probation are given one semester to raise their cumulative

GPA to 3.0. Failure to meet this requirement will typically result in dismissal from the Institute.

Students obtaining a GPA below 3.0 are in jeopardy of not progressing successfully through the program and are expected to work with faculty, teaching assistants, tutors, and Student Affairs to ensure they avail themselves of every opportunity to succeed. The Maximum time allowed does not include periods of approved leaves of absence.

For more specific policies, MSPA program students should refer to the MSPA Program Student Handbook and OTD program students should refer to the OTD Program Student Handbook.

Academic Progression Expectations | MSGC

All students in the MSGC program will be required to maintain a GPA of 3.0 or higher and pass all courses in each semester to progress to the next semester. Students will have an opportunity to ex- plain any special circumstances to the Student Progression Committee (SPC). Based on the review of the student's performance, the Committee will make a recommendation to the Dean for a remediation plan, placement on probation, or withdrawal from the program.

Students who have failed one course in the semester will have the opportunity to remediate the course prior to the beginning of the next semester by working with the course coordinator. The course coordinator will develop a remediation plan that will be an abbreviated program of re-study designed to meet the needs of the student who is repeating the course. The remediation plan will be sent to the program director for approval. Remediation may include retaking of the examinations, re- writing of papers, or completing special projects to demonstrate proficiency in the course. Students failing two or more courses in a semester will either repeat the courses the next time the courses are available or be withdrawn from the program.

A student whose cumulative GPA drops below 3.0 will be placed on probation and will be given one semester to raise their cumulative GPA to 3.0. Failure to meet this requirement may result in dismissal from the Institute. Students obtaining a 3.0 or below are in jeopardy of not progressing successfully through the program and are expected to work with program leadership, faculty, teaching assistants, tutors, and Student Affairs staff to ensure they avail themselves of every opportunity to succeed.

Remediation for clinical internships may be required if a student is not performing at the program's expected levels of competence. Student evaluations or verbal and written communications with the clinical supervisors, the program leadership may indicate unsatisfactory performance. Student Progression Committee (SPC) will develop a specific remediation plan that may include repeating the clinical internship. Please refer to the MSGC Fieldwork Manual for further description of clinical progression and remediation policies and expectations.

Progression Requirements | MSPA Program

Due to the sequential nature of the curriculum, students must successfully complete all courses within each semester before becoming eligible to enroll in courses in the subsequent term. If any courses were not successfully completed, the student must have a remediation plan established and permission from the MSPA Progression and Professionalism Committee

in order to permit their continued progression. At the conclusion of each term, the MSPA Progression and Professionalism Committee reviews each student's academic performance and professional conduct. Students must be recommended for progression by the MSPA Progression and Professionalism Committee to be eligible to continue to the subsequent semester. In order for a student to progress from the didactic phase into the clinical phase, they must also be recommended by the MSPA Progression and Professionalism Committee.

The following are circumstances that will affect a student's progression through the Program:

- If a student is remediating a course or course component, they may progress to the subsequent semester at the discretion of the MSPA Progression and Professionalism Committee
- If a student earns a semester GPA below 3.0, they will be placed on academic probation and allowed to progress in the program at the discretion of the MSPA Progression and Professionalism Committee
- If a student earns a semester GPA below 3.0 for two semesters, they may be dismissed from the program
- Earning one final course grade of F during the didactic or clinical phase of the program will result in referral to the MSPA Progression and Professionalism Committee for consideration of academic dis- missal from the program
- If a student receives an alleged violation of the Professionalism Policy, they will first be evaluated by the MSPA Progression and Professionalism Committee, and the Dean of Students and/or the Vice President of Academic Affairs will be notified. If the student's alleged actions are in violation of the KGI Honor Code, the Student Conduct Committee may also be convened to determine if the student should be placed on academic probation and allowed to progress in the program. For more information on the Professionalism Policy, please review the "Professionalism" section of the MSPA Pro- gram Student Handbook, as well as the "Student Conduct | Honor Code" section in this handbook
- If the student exceeds the maximum time-to-completion for the program, they may not be able to graduate from the MSPA Program. Students must still complete the MSPA program within the maxi- mum time-to-completion, which is defined as 150% of the program length (i.e., 3.375 years). Deceleration and remediation must also be completed within this timeframe. Delays due to approved personal or medical leaves of absence are excluded from the maximum time-to-completion requirement. Please refer to the "Leave of Absence" section of the MSPA Program Student Handbook and this handbook for further details.

A student may appeal a progression decision through written documentation to the MSPA Progression and Professionalism Committee.

Progression Requirements | OTD Program

Due to the sequential nature of the curriculum, students must successfully complete all courses within a trimester before becoming eligible to enroll in courses in the subsequent term. If any courses were not successfully completed, the student must have a remediation plan established and permission from the OTD Progression and Professionalism Committee in order to permit their continued progression. At the conclusion of each semester, the OTD Progression and Professionalism Committee reviews each student's academic performance and professional conduct to help support student success.

The following are circumstances that will affect a student's progression through the Program:

- If a student is remediating a course or course component, they may progress to the subsequent semester at the discretion of the OTD Progression and Professionalism Committee

- If a student earns a semester GPA below 3.0, they will be placed on academic probation and allowed to progress in the program at the discretion of the OTD Progression and Professionalism Committee
- If a student earns a semester GPA below 3.0 for two semesters, they may be dismissed from the pro- gram

- Earning one final course grade of F during the didactic or clinical phase of the program will result in academic dismissal from the program

- If a student receives an alleged violation regarding professionalism, they will first be evaluated by the OTD Progression and Professionalism Committee, and the Senior Director of Student Affairs and/or the Vice President of Academic Affairs will be notified. If the student's alleged actions are in violation of the KGI Honor Code, the Student Conduct Committee may also be convened to determine if the student should be placed on academic probation and allowed to progress in the program

- If the student exceeds the maximum time-to-completion for the program, they may not be able to graduate from the OTD Program. Students must complete the OTD program within the maximum time-to-completion, which is defined as 150%of the program length. Deceleration and remediation must also be completed within this timeframe. Delays due to approved personal or medical leaves of absence are excluded from the maximum time-to-completion requirement.

A student may appeal a progression decision through written documentation to the OTD Progression and Professionalism Committee.

School of Pharmacy (SOP)

PharmD students are considered to be in good academic standing and performing satisfactorily if they have successfully achieved at least a level of "70%" or passing grade in all courses, progression exam assessments and experiential assessments. Students will no longer have summative assessments that determine progression.

In addition, students must maintain a minimum cumulative 2.5 GPA at the end of each semester. If the student is unable to achieve a minimum cumulative 2.5 GPA, they will be placed on academic probation. Students who are unable to raise their GPA to a minimum cumulative 2.5 GPA at the end of the next semester are subject to dismissal from the program.

Students who fail up to one course per semester will be allowed to remediate the course over the winter break or summer in a remedial course. Students who are not successful in remediation must re-take the course when it is offered next if they are eligible to progress in the program, resulting in delayed graduation. Such students remain on academic probation as a result of receiving an "F" in re- mediation.

Progression through the curriculum will be determined as part of the terms of probation; terms of probation will be decided by the Student Progression Committee and the student will be notified of the terms of probation by official correspondence from the SOP Dean.

Students who fail a course on the second attempt will be dismissed from the program. There will be no option to remediate a course on the second attempt.

Students who fail two courses in one semester will not progress. They must re-take the courses when they are next offered if they are eligible to progress in the program, resulting in delayed graduation. Re-taking a course counts as remediation for the course.

Students who fail three or more courses in an academic year are subject to dismissal from the program.

Students will be allowed to remediate a maximum of three didactic courses total during the P1 to P3 years of their academic career. Students who fail additional courses beyond the maximum of three remediation opportunities will be dismissed from the program.

Students will be allowed to remediate a maximum of one IPPE and one APPE course in their academic career. Students who fail two or more IPPE or two or more APPE will be dismissed from the program.

Students who have been delayed for academic reasons once are not eligible for a second delay for academic reasons. Students who cannot progress without a second academic delay will be dismissed from the program.

Unsatisfactory Progress During Introductory Pharmacy Practice Experiences (IPPEs) and Advanced Pharmacy Practice Experiences (APPEs)

- Each student must successfully complete and pass all IPPEs and APPEs

- Students must successfully complete all IPPE 1 and IPPE 2 requirements during the second academic year of the curriculum in order to advance to P-3 status and all IPPE 3 and Certificate Experience Elective requirement during the third academic year of the curriculum in order to advance to P-4 status
- To successfully complete the IPPEs, students must achieve a score of 70% on the final assessment and
  submit all required assignments by the last day of the course

- Each student must successfully complete the five required core APPE courses and two elective APPE courses. To successfully complete each of the seven APPE courses students must earn a score of 70 or above, have no more than three “deficient” ratings on the Ability Based Outcomes and/or EPAs on the final evaluation and submit all required assignments by the last day of the course. Students who receive a “Deficient” rating on four or more ABO and/or/EPA competencies, score <70 for the final evaluation or fail to submit required assignments by the last day of the course will automatically fail the course.

Students who do not successfully pass an experiential education course (IPPEs, Certificate Experience Electives, APPEs) will be referred to the Student Progression Committee and the Office of Experiential Education. The Office of Experiential Education, in consultation with the

Student Progression Commit- tee, will consider student and preceptor factors in order to develop a student-specific remediation plan. Remediation will be created to help the student achieve the competencies (address deficiencies) and may involve targeted experiences, repeat of the IPPE/Certificate Experience Elective/APPE with a faculty member, or other appropriate action.

Students will only be allowed to remediate an IPPE, Certificate Experience Elective, and APPE once. Students who receive a second “F” in their IPPE, Certificate Experience Elective, and APPE are subject to dismissal from the program.

Required IPPEs and APPEs must be remediated in a comparable setting/site. Certificate Experience Electives and Elective APPEs that are not passed may be remediated by substituting a different Certificate Experience Elective and elective APPE (e.g., If the student did not pass an Elective APPE, such as Drug Information, a student may select Drug Information for remediation or change to another specialty, such as Home Infusion depending on preceptor availability).

KGI SPHS grade-related grievance policies and procedures will be followed for appeals for an “F” received in an IPPE, Certificate Experience Elective, and APPE course.

Satisfactory Academic Progress with regard to APPEs:

Failure of 1 Experiential Education (IPPE, Certificate Experience Elective, APPE) course/rotation will result in academic probation until successful completion of the failed course/rotation.

Progression through the curriculum will be determined as part of the terms of probation; terms of probation by official correspondence from the SOP Dean.

Failure of 2 Experiential Education (IPPE, Certificate Experience Elective, APPE) course/rotation course/rotations will result in dismissal from the program

Method of Evaluation of Student Progression

Academic progression will be determined through regular formative and in-term summative assessments, which allow students to gauge their progress and identify weakness early. However, it is the final passing course grade (including remediation) which will demonstrate if a student has achieved the required competencies.

Experiential Education experiences will be assessed using online evaluation forms. Students are encouraged to engage in a formative assessment with their preceptor at midterm to discuss the stu- dents where current progress is in relation to their goals. Students will have a summative assessment at the end of each Experiential Education Experience. Students receive one credit hour for every 40- 45 hours spent in an experiential setting. Students will receive credit for each course. Credit will be assigned based on hours spent in class, in lab, or in the practice experience. Students receive one credit hour for every 15 hours spent in a didactic classroom setting.

Progression to P-2, P-3, and P-4 Year

P-2 Year Requirements

Prior to starting the P-2 year, all of the following must be completed:

- Successful completion of all P1 courses
- Compliant in all Complio requirements

P-3 Year Requirements

Prior to starting the P-3 year, all of the following must be completed:

- Successful completion of all P1 and P2 courses
- IPPE 1 and IPPE 2 rotations
- Compliant in all Complio requirements

P-4 Year Requirements

Prior to starting the P-4 year, all of the following must be completed in addition to all curricular obligations:

- Successful completion of all P1, P2, and P3 courses
- IPPE 3 rotation
- Compliant in all Complio requirements
- Application for graduation on file with the Registrar's Office

Remediation

Remediation is an abbreviated program of restudy designed to meet the needs of the students who require additional assistance to demonstrate the achievement of course competencies. During this course, the student will be assessed on course competencies in the initially-failed course.

Policy for the Remediation Delivery

Remediation methods will be determined by the appropriate faculty in conjunction with their Pro- gram Director and will be communicated to the student prior to or at the beginning of the remedial course.

Duration, scheduling, and other requirements for remediation will be determined by the appropriate faculty in conjunction with the Program Director. To pass remediation, a student must achieve an overall score of 70% on the remediation summative assessment. Upon such passing performance, the highest grade awarded for the course will be limited to 70% ("C"). The inability to pass the remediation summative assessment would result in delayed progression.

Note: Any deviation from this policy must be approved in writing by the academic dean and articulated to the students at least one week prior to the scheduled extended learning. All matters regarding attendance, dress code, assessment, etc. during the extended learning period are covered by the School's academic policies.

Faculty and Student Participation in Remediation

Students who do not pass courses during the academic semester may be eligible for

remediation. Students will be ineligible for remediation if they have failed two courses during the preceding semester.

Scheduling of Remediation

Only one remedial course can be scheduled for an individual student per semester. Students are not allowed to participate in electives or experiential rotations during their assigned remediation session without prior approval by the Student Progression Committee (SPC). The Program Director is responsible for scheduling remedial courses.

Nature of Remediation

The remediation course will not be a complete re-teaching of the failed course, but rather a focused program that may include readings, review of lecture recordings, assignments, practice problems, and discussions with the faculty. The remediation will be designed by the faculty for self-study/small group learning by the students. At the end of the remediation course, the student must demonstrate to the faculty that the academic deficiency has been removed and that the student is now at the same level of understanding and competency as the rest of the class.

The course coordinator will submit remediation course syllabus to the Program Director for approval. The course coordinator will notify all participating students prior to the scheduled remedial course. All course faculty must submit questions to the course coordinator in advance of the scheduled assessment. Assignments or homework may not be assigned in lieu of the summative assessment.

Details of Remediation and Progression:

- Students who fail up to one course per semester will be allowed to remediate the course over the winter break or summer in a remedial course.
- Students who are not successful in remediation must re-take the course when it is offered next if they are eligible to progress in the program, resulting in delayed graduation.
- Students who fail a course on the second attempt will be dismissed from the program. There will be no option to remediate a course on the second attempt.
- Students who fail two courses in one semester will not progress. They must re-take the courses when they are next offered if they are eligible to progress in the program, resulting in delayed graduation. Re-taking a course counts as remediation for the course.
- Students who fail three or more courses in an academic year are subject to dismissal from the program.
- Students will be allowed to remediate a maximum of three didactic courses total during the P1 to P3 years of their academic career. Students who fail additional courses beyond the maximum of three remediation opportunities will be dismissed from the program.
- Students will be allowed to remediate a maximum of one IPPE and one APPE course in their academic career.
- Students who fail two or more IPPE or two or more APPE will be dismissed from the program.
- Students who have been delayed for academic reasons once are not eligible for second delay for academic reasons. Students who cannot progress without a second academic delay will be dismissed from the program.

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Time to Completion

Students are expected to make satisfactory academic progress as outlined in the requirements of their program. A student who exceeds their time to completion by more than 150% time may be subject to academic dismissal from their program, in which case they would need to leave the Institute. For example, the PharmD program is a four-year program in length and six years would represent 150% time; MBS and MS are both two-year programs and three years would represent 150% time.

*Excludes any time spent on a Leave of Absence or approved program deceleration

A student who wishes to petition for additional time to completion, due to extenuating circumstances, should consult their graduate academic advisor to: 1) determine a reasonable timeline for program completion; 2) develop a revised academic plan of study and; 3) request a letter of support. An extension may be requested for a minimum of one semester and a maximum of one year. A petition for additional time to completion must be approved and supported by the program director and, if applicable, the supervising instructor or advisor (e.g., capstone, thesis or dissertation).

A petition to extend beyond 150% time in the program, along with all required documents, must be submitted to the dean's office in a timely manner. A decision will be rendered as soon as possible once all documentation has been reviewed. The decision of the dean is final and there are no further avenues of appeal. Should an extension be granted, the student should be aware that all coursework will be reviewed for timeliness. Students who are granted a one-time extension may petition for one additional semester, otherwise they will be subject to dismissal. Increased time to completion may have additional financial implications, and will affect eligibility for additional loans, scholarships or stipends for the program and may also result in Department of Education sanctions, including change of loan interest rate or change in deferment status. Please check with the Office of Financial Aid and/or the Department of Education website for more information.

Please note:

- Under extenuating circumstances, the 150% rule may be appealed to the Academic Dean.
- Repeated coursework is allowed as stated in KGI's student handbook. However, these repeated courses count towards the calculation of the 150% time limit.

Students attending Keck Graduate Institute must complete their program within 150% of the timeframe allotted for their program.

Henry E. Riggs School of Applied Life Sciences (Riggs School)

PPA – 1.5 years/3 semesters

PPC – 1.5 years/3 semesters

MBM – Can be completed part-time or full-time

MBS – 3 years/6 semesters

MCHA – Can be completed part-time or full-time

MEng – 3 years/6 semesters

MS – 3 years/6 semesters

MSGDA – 3 years/6 semesters

MSMDE- 1.5 years/3 semesters

School of Health Sciences (SHS)

MSGC – 3 years/6 semesters

MSPA – 3.4 years/10 semesters

OTD – 3.75 years/12 semesters

School of Pharmacy (SOP)

PharmD – 6 years/12 semesters

Scientific or Research Misconduct

Scientific or research misconduct is defined as fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the academic and scientific community for proposing, conducting, or reporting research, and does not include honest error or honest differences in interpretation or judgments of data. Further information can be obtained from the U.S. Office of Research Integrity, Department of Health and Human Services, who's Web site can be found at https://ori.hhs.gov/. Possible incidences of misconduct are to be reported immediately to the Academic Dean, who will initiate the appropriate procedures.

Student Grievances

Student Accessibility Services Grievance Policy and Procedure

For information regarding Student Accessibility Services and the Student Accessibility Service Grievance Policy and Procedure , please visit the Student Accessibility Services page.

Grade-Related Grievances | Riggs School of Applied Life Sciences

All students shall be treated fairly with respect to evaluations made of their academic performance, standing, and progress. KGI presumes that academic judgments by its faculty are fair, consistent, and objective. Students must understand that the substitution of a different academic judgment for that of the original evaluator is a serious intrusion upon teaching prerogatives. Nonetheless, KGI believes it is essential to provide an appeals mechanism to students who believe that they were erroneously, capriciously, or otherwise unfairly treated in

an academic or cooperative education determination.

This includes claims of misinterpretation or inequitable application of any academic provision of the Student Handbook or Faculty Handbook. Issues concerning admission or readmission into a program cannot be appealed beyond the actual Enrollment process.

In most cases, students should first discuss their concerns with the course instructor to determine the possibility of reaching an agreement concerning the issue. If the student is not satisfied with the out- come of this discussion, or if the student is not comfortable discussing the issue with the instructor, the student should request a meeting with the Program Director to attempt to resolve the issue at the informal level. If these informal attempts to resolve the issue fail, the student can enter a formal procedure by following these steps: A student may appeal an academic determination by submitting a written statement to the Academic Dean which specifies the details of the action or judgment.

The statement should include a description of the issue, when the problem occurred, who was involved, the basis of the appeal and the resolution sought. Documentation, including submitted assignments and communications, should be attached to the letter or forwarded to the Academic Dean at the same time the grievance is submitted. All appeals of grades need to be initiated and resolved within one month of the end of the course or assignment of the grade and before the student graduates.

Grade grievances for courses taken outside of the Riggs School are bound by the procedures and processes of that school or institution. Students can seek the advice of KGI deans or faculty to navigate this process, but the ultimate decision rests with the home institution for the grade.

Didactic Grade-Related Grievances | School of Pharmacy and School of Health Sciences

Matters related to grading disputes shall include issues regarding grades awarded or processes by which grades are determined. The process must always begin with a discussion with the faculty member(s) who awarded the grade. The student is also encouraged to meet with his or her faculty mentor and may do so at any point in the process. If the situation is not resolved through discussion with the faculty member(s) involved, the student may initiate the grievance process by completing a Grade- Related Grievance form that will be available from the academic dean. The Grade-Related Grievance form must be submitted to the faculty member(s) who awarded the score. This form must be submit- ted within five (5) business days following the posting of the score being disputed. Non-written com- plaints or written complaints received after this deadline may not be accepted.

The faculty member who awarded the grade will review the grievance and respond to it within five (5) business days or sooner in most cases. Their response will be e-mailed to the student and the course coordinator (second level appeal). If the course coordinator is also the faculty member, the response shall be sent directly to the student and the Program Director. The Program Director shall review the form and response from the faculty member/Course Coordinator and make their decision (third level appeal). Their decision will be sent by e-mail to the student and the academic dean. The academic dean will then review the form and the response from the earlier levels and make their decision (fourth level appeal). Their decision will be forwarded to the student and the Provost (fifth and final level appeal). The Provost will review the form and the response from all earlier levels and make their decision. The Provost's decision will be final. This process may stop at any level if the grievance is resolved in favor of

the student.

If the student wants to withdraw the grievance for any reason, they must do so immediately by sending an email to the faculty member and the Academic Dean. Once a student sends an email confirming that they want to withdraw the grievance, no further action is required.

If a student has a pending grievance that affects whether they can continue to the next semester or can participate in remediation, they shall be allowed to continue in classes until the grievance is re- solved. If the grievance is resolved in favor of the student, and they are allowed to continue in the semester or remediation, then all grades/scores received by the student during this transition shall re- main valid. However, if the student's grievance is denied, any scores/grades received by the student during the pending grievance shall be considered invalid.

Quick Reference Grade-Related Grievances

- (At any point in the process, the student may meet with their faculty advisor.)
- Discuss the issue with the Instructor(s) who assigned the grade; if not resolved.
- Discuss the issue with the Course Coordinator/Director(s); if not resolved
- Discuss the issue with the appropriate Program Director; if not resolved
- Initiate a formal grievance, in writing to the Instructor(s) who assigned the grade, after receiving a form from the Academic Dean
- Instructor will respond to the grievance and forward their response to the student and Course Coordinator (Program Director, if Instructor is the same as Course Coordinator)
- Response at each level (Course Coordinator, Program Director, Academic Dean and the Provost) will automatically be forwarded along with the form to the next level unless the grievance is resolved in favor of the student
- The student may choose to withdraw the grievance at any time by sending an email to the Instructor(s) who assigned the grade and the Academic Dean
- If the grievance reaches the level of the Provost, Provost will notify the student of the results in writing; Provost's decision is final.

Please note: The final authority rests with the Provost for both Non-Grade-Related and Grade-Related grievances. The individual receiving the grievance will adhere to the process above. Deviation from said process will disqualify the grievance. For more specific policies, MSPA Program students should refer to the MSPA Program Student Handbook.

Experiential Education Grade-Related Grievances | PharmD

Matters related to experiential education grading disputes shall include issues regarding grades awarded or processes by which grades are determined. Once the preceptor has submitted the evaluation, the student must NOT contact the preceptor to negotiate a change in the evaluation.

The student MUST formally submit the list of the competencies in which they are challenging the grade, along with examples of how they met the criteria for the grade which they desire for

each competency to the Course Coordinator/Director of Experiential Education. The Course Coordinator/Director of Experiential Education will review the list and discuss it with the preceptor. If the issue is not resolved, the Course Coordinator/Director of Experiential Education will submit the information to the SOP Dean.

If the situation is not resolved, the student may initiate the experiential education grade-related grievance process by completing a “Grade-Related Grievance” form. The student must contact the SOP Dean to request the “Grade-Related Grievance” form. The student must complete and submit the “Grade-Related Grievance” form to the Course Coordinator within five (5) business days following the posting of the score being disputed in E*Value. Non-written grievances will not be accepted.

Grievances received after this deadline will not be accepted.

The Course Coordinator will review the grievance and respond within five (5) business days or sooner in most cases (first level appeal). Their response will be emailed to the student and the Director of Experiential Education. The Director of Experiential Education will review the form and response from the Course Coordinator (second level appeal). Their response will be emailed to the student and the SOP Dean. The SOP Dean will review the form and the responses from the earlier levels and make their decision (third level appeal). Their decision will be forwarded to the student and the Provost (fourth and final level appeal). The Provost will review the form and the responses from all earlier levels and make their decision. The Provost’s decision will be final.

This process may stop at any level if the grievance is resolved in favor of the student.

If the student wants to withdraw the grievance for any reason, they must do so immediately by sending an email to the Course Coordinator/Director of Experiential Education and SOP Dean. Once a student sends an email confirming that they want to withdraw the grievance, no further action is required.

Quick Reference Experiential Education Grade-Related Grievances

(At any point in the process, the student may meet with their faculty advisor.) Once the preceptor has submitted the evaluation, the student must NOT contact the preceptor to negotiate a change in the evaluation.

The student must formally submit the list of the competencies in which they are challenging the grade, along with examples of competency to the Course Coordinator; if not resolved

Discuss the issue with the Director of Experiential Education; if not resolved

Email the SOP Dean to formally request the “Grade-Related Grievance” form. This form must be submitted within five (5) business days following the posting of the score (in E*Value) being disputed.

Initiate a FORMAL grievance, in WRITING, to the Course Coordinator who assigned the grade

The course coordinator or director will respond to the grievance and forward their response to the student and Director of Experiential Education within five (5) business days of receiving the “Grade- Related Grievance” form

Response at each level (Course Coordinator, Director of Experiential Education, SOP Dean, and the Provost) will automatically be forwarded along with the form to the next level unless the grievance is resolved in favor of the student

The student may choose to withdraw the grievance at any time by sending an email to the course coordinator/director and the SOP Dean

If the grievance reaches the level of the Provost, Provost will notify the student of the results in writing; Provost's decision is final.

Please note: The final authority rests with the Provost for both Non-Grade-Related and Grade-Related grievances. The individual receiving the grievance will adhere to the process above. Deviation from said process will disqualify the grievance. For more specific policies, MSPA Program students should refer to the MSPA Program Student Handbook.

Experiential Grade-Related Grievance policies for OTD students can be found in the KGI OTD Student Fieldwork and Capstone manual.

Didactic Non-Grade-Related Grievances | Keck Graduate Institute

The student shall first attempt to resolve the grievance with the faculty member(s) or staff involved. The student is also encouraged to meet with his or her faculty mentor at any point in the grievance process. If the student and the faculty member(s)/staff involved in the matter cannot resolve the grievance, the student shall consult with the Program director or immediate supervisor of the appropriate department. Faculty and/or supervisor should complete a "Student Encounter Form" to document the conversation.

If the student and program director/immediate supervisor cannot resolve the grievance, the student must submit a written, signed statement to the Dean of Students (DOS) describing the specifics of the grievance within five (5) business days following the occurrence of the incident. Nonwritten com- plaints or written complaints received after this deadline may not be accepted.

After receipt of the written complaint, the DOS will provide a copy of the complaint to the personnel involved and they will be given an opportunity to respond in writing no later than five (5) business days after receipt of the complaint. In the event that the issue is still not resolved, the written complaint and personnel response will be taken to the personnel's immediate supervisor. The immediate supervisor will then respond in writing to the appeal. If the student does not accept the decision, the DOS will meet with the student, hear the grievance, review written materials and respond in writing with a decision within five (5) business days after receipt of the complaint.

If the student wishes to appeal the decision of the DOS, they must do so in writing to the Provost within five (5) business days of receipt of the written decision. The DOS will forward all written materials to the Provost for consideration. The Provost will meet with the student and appropriate personnel and provide a written decision within ten (10) business days of receiving the appeal. The Provost's decision is final.

Quick Reference Non-Grade-Related Grievances

(At any point in the process the student may meet with their faculty advisor)

- Meet with Faculty Member(s)/staff involved; if not resolved
- Meet with Program Director/Immediate Supervisor; if not resolved
- Student makes written statement to DOS
- DOS meets with the personnel involved, and personnel will respond in writing with a resolution; if not resolved
- Program Director/Immediate Supervisor will review materials, meet with student and personnel, and respond in writing with a decision; if not resolved
- DOS meets with student regarding the grievance and respond in writing with a decision; if not re- solved
- Provost will review materials, meet with student and personnel, and respond in writing with a decision; Provost's decision is final.

Experiential Education Non-Grade-Related Grievances | PharmD

The student shall first attempt to resolve the grievance with the Office of Experiential Education member/staff or preceptor involved. The student is also encouraged to meet with his or her faculty advisor at any point in the grievance process. If the student and the Office of Experiential Education member/staff or preceptor involved in the matter cannot resolve the grievance, the student shall consult with the Immediate Supervisor of the OEE member/ staff or the Director of Experiential Education (if the preceptor is involved).

If the student and the Immediate Supervisor of the OEE member/staff or the Director of Experiential Education (if the preceptor is involved) cannot resolve the grievance, the student must submit written statement to the Dean of Students (DOS) describing the specifics of the grievance within five (5) business days following the occurrence of the incident. Non-written complaints or written complaints received after this deadline may not be accepted.

After receipt of the written complaint, the DOS will provide a copy of the complaint to the personnel involved and they will be given an opportunity to respond in writing no later than five (5) business days after receipt of the complaint. In the event that the issue is still not resolved, the written com- plaint and personnel response will be taken to the personnel's immediate supervisor. The immediate supervisor will then respond in writing to the appeal. If the student does not accept the decision, the DOS will meet with the student, hear the grievance, review written materials and respond in writing with a decision within five (5) business days after receipt of the complaint.

If the student wishes to appeal the decision of the DOS, they must do so in writing to the Provost within five (5) business days of receipt of the written decision. The DOS will forward all written mate- rials to the Provost for consideration. The Provost will meet with the student and appropriate personnel and provide a written decision within ten (10) business days of receiving the appeal. The Provost's decision is final.

Quick Reference Non-Grade-Related Grievances

- Consult with the OEE member or preceptor involved: if not resolved

- Consulting with the Immediate Supervisor of the OEE member or the Director of Experiential Education if the preceptor is involved; if not resolved

- Student makes written statement to the Dean of Students (DOS)

- DOS meets with the OEE member involved or the Director of Experiential Education (if preceptor is involved); if not resolved
- Immediate Supervisor will review materials, meet with student and OEE personnel, and respond in writing with a decision; if not resolved

- DOS meets with student regarding the grievance and respond in writing with a decision; if not re- solved
- Provost will review materials, meet with students and personnel, and respond in writing with a decision; Provost's decision is final.

Experiential Non-Grade-Related Grievance policies for OTD students can be found in the KGI OTD Student Fieldwork and Capstone manual.

Technical Standards for Admissions, Continuation, and Graduation

KGI is committed to providing degree programs without regard to disability, while assuring that academic and technical standards are met. Technical standards represent the essential non-academic requirements that a student must demonstrate to successfully participate in KGI's certificate and degree programs and meet the professional competency requirements. Students must demonstrate competence in intellectual, physical, and social tasks that represent fundamentals of being able to success- fully complete the program's curriculum in order to pursue any career path in professional practice. Thus, the standards are prerequisites for admission, continuation, and graduation from KGI. The program faculty will monitor the student's ability to meet these standards.

KGI will consider for admission any applicant who demonstrates the ability to perform or to learn to perform the skills listed in the Technical Standards for which the student has applied for. All applicants are held to the same academic and technical standards of admission and training, with reasonable accommodations as needed for students who have registered with accessibility services. KGI reserves the right not to admit any applicant who cannot meet the Technical Standards set for each program with reasonable accommodations. Applicants are not required to disclose the nature of their disability(ies), if any, to the Admissions Committee. To matriculate into a program, the applicant must sign the Technical Standards Certification Form documenting their ability to meet the standards. This form is part of the supplemental application. However, if a student cannot demonstrate the necessary skills and abilities, it is the responsibility of the student to request an appropriate accommodation. Any applicant with questions about the technical standards is strongly encouraged to discuss the issue with The Division of Student Affairs and/ or the Vice President of Academic Affairs prior to the interview process. If appropriate, and upon the request of the applicant/student, the school will consider technological and other facilitating mechanisms needed in order to train and function effectively as a professional student.

Candidates for any KGI program must be able to perform the essential functions set by their programs in order to complete graduate training.

Textbooks

The HEOA requires institutions of higher education to display textbook information (textbook title, price, and ISBN identifier) at the time enrollment opens. Huntley Bookstore offers books for sale and rent.

Transfer Credit Policy

KGI does not typically accept transfer credit due to the nature of our courses. However, under special circumstances, graduate coursework taken at another institution before matriculation at KGI can be made available for transfer credit upon request. For transfer credit inquiries, students can contact the admission counselor for questions about specific courses.

Transfer Credit Requirements
Transfer credit for coursework completed before an individual becomes a student at KGI should be submitted and evaluated as part of the individual application process with the Admissions Counselor. As a part of the process the applicant and the admissions counselor will complete the Transfer Credit Request Form, specifically identifying the courses for which transfer credit is being requested. The Program Director and Dean will review the petition and will submit any approved transfer credits to the Registrar's Office for processing.

In addition to being approved by the Program Director and Dean. All transfer credits must meet the following criteria:

- All requests must be accompanied by an official transcript from the institution where the coursework was completed.
- Students must have received a grade of B or better in the course.
- Courses mut be at the graduate level at the transfer institution (unless otherwise specified by a university and program specific Memorandum of Understanding (MOU)) and constitute a fair and reasonable equivalent to current KGI coursework at the graduate level.
- The institution where the coursework was completed must be regionally accredited in the U.S. to grant graduate degrees.
- The course(s) must logically fit into the program for the degree being pursued at KGI.
- Limits on the number of units that may be transferred are determined by the KGI program.
- Individual programs reserve the right to deny transfer credit for any and all coursework that may be considered old, dated, or no longer relevant to the discipline.

Approved Transfer Credit
Approved transfer coursework is recorded on your transcript, including the originating institution and the number of units awarded. Please note that grades earned in courses taken outside of KGI are not calculated into your KGI GPA.

Transfer Credit from Other Claremont Colleges

Courses completed at other Claremont Colleges can be accepted for transfer credit when the student is part of a university-approved accelerated Program (e.g. the Claremont Graduate University, Peter F. Drucker and Masatoshi Ito Graduate School of Management MBA and KGI MBS "2+1" program) or if the student has taken specific courses approved for such programs according to the program specific MOU. For further program and transfer credit inquiries, please contact your Program Director*. Furthermore, please note that grades earned from other Claremont Colleges are not calculated into your KGI GPA.

Transfer Student
If you are currently in the U.S. attending another institution, please provide your current school with our Transfer Instructions. If you will be traveling outside of the US before you start at KGI, please let us know, as we will need to provide you with a temporary I-20. Your school must transfer your record before we can do this, so it is important to get that process started with them as soon as possible.

Your transfer must be completed within 15 days from the start of classes. Transfer Credit from another program to KGI.

KGI does not typically accept transfer credit due to the unique nature of our courses. However, contact your admissions counselors for questions about specific courses.

Vaccinations

For information regarding vaccinations, please refer to the Student Handbook.

Required Immunizations
All students are required to provide the following proof of up-to-date immunization status.

The following immunizations are required:

Domestic Students

- Measles, Mumps, and Rubella (MMR) – Two-dose series
- Tetanus, Diphtheria, Pertussis (Tdap) – Primary series plus a Tdap booster within the past 10 years
- Tuberculosis (TB) – Submit previously submitted TB skin test, chest X-ray (CXR), or Quantiferon blood test (if applicable). If you previously submitted documentation for your Tuberculosis (TB) screening, you do not need a new test—you may re-upload the same documentation submitted last year.

International Students

- Hepatitis B (HBV) – Three-dose series
- Measles, Mumps, and Rubella (MMR) – Two-dose series
- Tetanus, Diphtheria, Pertussis (Tdap) – Primary series plus a Tdap booster within the past 10 years
- Tuberculosis (TB) – Submit previously submitted TB skin test, chest X-ray (CXR), or Quantiferon blood test (if applicable)
- Varicella Zoster (Chickenpox/VZV) – Two-dose series or documented history of the disease

If your program is fully online and you will not physically access campus at any point, you are

exempt from completing this immunization requirement.

If you are in our OTD, MSGC, MSPA, or PharmD programs, please refer to your program handbook and work directly with your programs.

Veteran Benefits

KGI is proud to support students who have served, or are currently serving, in the U.S. Armed Forces. Eligible students may access VA educational benefits, with some programs also available to spouses and dependents of veterans. Below is a step-by-step guide to help you navigate the process.

1. Determine Your Eligibility
To select the appropriate VA educational benefit, begin by confirming your eligibility on VA.gov's eligibility page. You can then use the GI Bill Comparison Tool to estimate benefits and compare programs.

Here are some of the main benefit programs available:

- Montgomery GI Bill - Active Duty (MGIB-AD, Chapter 30): For veterans with active duty service.
- Veteran Readiness and Employment (VR&E, Chapter 31) Formerly called Vocational Rehabilitation and Employment: For veterans with a service-connected disability.
- Post-9/11 GI Bill® (Chapter 33): For veterans who served after Sept. 10, 2001.
- Dependents' Educational Assistance (DEA, Chapter 35): For spouses and children of permanently disabled or deceased veterans.
- Montgomery GI Bill - Selected Reserve (MGIB-SR, Chapter 1606): For members of the Reserve or National Guard.

2. Apply for VA Educational Benefits
To begin the process, complete your Application for VA Benefits through the U.S. Department of Veteran Affairs. Please note that the application process can take time. We strongly recommend applying as early as possible to avoid delays in receiving your benefits.

3. Receive Your Certificate of Eligibility (COE)
Once your application is reviewed and approved, and depending on program eligibility, the VA will mail you a Certificate of Eligibility (COE). You can check the status of your application and find additional resources at VA.Gov.

4. Submit VA Documents to KGI
Once you have received your COE, please complete the Request to Initiate VA Benefits at KGI Form and upload your COE and DD-214 form (if applicable). If your VA-approved program does not provide a COE, you do not have a DD-214, or you have additional questions, please contact registrar@kgi.edu.

Keep Your Information Updated
Please inform the KGI Certifying Official of any changes to your:

- VA benefits
- Course enrollment
- Mailing address

Failure to update this information may result in delayed or discontinued benefit payments.

VA Yellow Ribbon Program

KGI is proud to participate in the Yellow Ribbon Program. This program is a partnership between KGI and the Department of Veterans Affairs (VA). The program is designed to help students supplement their Post 9/11 Veteran's Benefits. Veterans and children of eligible veterans, who meet the eligibility requirements and whose tuition and fees exceed the amount of the Post-9/11 GI Bill at the 100% benefit level are eligible to receive additional funds from KGI through the Yellow Ribbon Program.

KGI supports up to 10 Yellow Ribbon Program-qualified students each academic year. Yellow Ribbon qualified veterans may receive up to $10,815 per year from KGI and the Department of Veterans Affairs will match at the same amount and issue payment directly to KGI. These additional VA funds are provided without an additional charge to your Post 9/11 Veteran's Benefits entitlement.

Eligibility Guidelines

In order to be eligible for the Yellow Ribbon Program, you must qualify for the Post-9/11 GI Bill at the 100% benefit level and at least one of the following must be true:

- You served at least 36 months on active duty (either all at once or with breaks in service) and were honorably discharged, or
- You received a Purple Heart on or after September 11, 2001, and were honorably discharged after any amount of service, or
- You served at least 30 continuous days (all at once, without a break) on or after September 11, 2001, and were discharged or released from active duty for a service-connected disability, or
- You're an active-duty service member who has served at least 36 months on active duty (either all at once or with breaks in service), or
- You're a spouse using the transferred benefits of an active-duty service member who has served at least 36 months on active duty, or
- You're a dependent child using benefits transferred by a Veteran, or
- You're a Fry Scholar

Eligibility for renewal is determined by the following factors:

- Student must have remaining entitlement under the Veteran Benefits.

- Student must remain in good academic standing.
- Student KGI must continue to participate in the Yellow Ribbon Program Website.

NOTE: The above information on eligibility was obtained from the Department of Veteran Affairs website. The VA determines eligibility, not KGI.

For further information, please visit the Yellow Ribbon Program Website.

Yellow Ribbon Program Application Process

If you would like to request to participate in the Yellow Ribbon Program, please ensure to check off the request box when filling out the Request to Initiate VA Benefits at KGI Form . Please be sure to upload your Certificate of Eligibility letter and DD-214 form, if applicable. A designated school certifying official will contact you regarding the status of your request.

Awarding

When the number of awards is limited, eligible award recipients are identified each term on a first-come, first-served basis.

When spaces are unlimited, all eligible graduate Yellow Ribbon recipients will automatically receive the annual award as needed.

Withdrawal Policies

Dismissal Policy

Academic Dismissal
The respective academic dean reserves the right to dismiss a student at any time in order to safeguard the School's standards of scholarship, professional and personal conduct, and orderly operation. Students who have made unsatisfactory progress may be dismissed from the program and who are "not in good academic standing". In addition, actions which threaten or endanger, in any way, the personal safety and/or well-being of self or other, or which disrupt or interfere with the orderly operation of the school are cause for immediate dismissal of the student. A student who is dismissed may not be reinstated or readmitted under any circumstances.

Honor Code Violation Dismissal
If a student is suspended or dismissed for violating the Honor Code:

- The institution will send a written notice to the student.
- The Dean of Students will inform the Registrar to officially withdraw the student from enrolled courses, unless an "F" grade is deemed more appropriate.
- No tuition refunds will be issued unless granted by administrative action.

KECK GRADUATE INSTITUTE
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Withdrawal Policy

Students may voluntarily withdraw from the institution at any time for personal reasons; however, they are strongly encouraged to consult with their Program Director to discuss potential implications before initiating the process.

Voluntary Withdrawal
To initiate a voluntary withdrawal from KGI, students must complete and submit the School Withdrawal Form to the Office of the Registrar.

Important Notes:

- A withdrawal is not finalized until all required approvals are obtained.
- If a student withdraws during an active term and after the add/drop deadline, a grade of "W" will be assigned for all courses without final grades.
- A student who leaves the school without completing the official withdrawal process within 30 days will automatically be administratively withdrawn from KGI.

Returning After Withdrawal
For information on returning to the program following a withdrawal, please refer to the Readmission & Reinstatement Policy.

Course Withdrawal Policy

Adding or Dropping Courses
Students may add or drop courses independently through the student portal before the add/drop deadline published in the Academic Calendar.

After the full-term add/drop deadline has passed, any changes to Module 2 courses or issues requiring administrative assistance must be handled through submission of an Add/Drop Form. In such cases, it is generally recommended, and may be required to obtain approval from your Academic Advisor or Program Director. Once submitted, you will receive an email confirmation within 1–2 business days indicating the request has been processed.

Procedure for Course Withdrawal (After Add/Drop Deadline)
Students may withdraw from a course after the add/drop deadline but before the withdrawal deadline. To view add/drop and withdrawal deadlines, please visit the KGI Academic Calendar.

To withdraw from a course, students must complete and submit the Course Withdrawal Form to the Office of the Registrar.

Implications of Course withdrawal:

- A "W" grade will be recoded on the transcript.
- No academic credit or grade will be awarded for the withdrawn course.
- If the course is required for graduation, the student must re-enroll and successfully complete it in a future term.

KECK GRADUATE INSTITUTE
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Admissions

Application Process

Once you have started your online application, you will be contacted by your admissions counselor who can help you through the application process. Each degree or certificate program at KGI has its own application procedures and requirements. View the chart above or visit our degrees and certificates webpage, then click on your program of interest to learn how to apply.

- What are the application requirements and deadlines?
  Program requirements and deadlines vary by program. Navigate to your program of interest webpage at KGI.edu to learn more about the specific requirements.

- What are the school codes needed to send my standardized test scores to KGI?
  While standardized test scores are not required for admission, applicants are welcome to submit scores using the following codes:
  - GRE and TOEFL: Institution code 4166. A department code is not necessary.
  - GMAT: Specify Keck Graduate Institute when prompted.

- MCAT: Printout required either by email or postal mail. Please ensure that your printout includes a verification code and your AAMC ID.

- Do I need to submit transcripts for every college-level class I have taken?
  Yes. KGI requires transcripts from all undergraduate and higher education institutions attended, even if you did not earn a degree from that school. Unofficial copies can be submitted for the application process. Should you have difficulty acquiring any transcripts, please contact your Admissions Counselor. If you are admitted and matriculate to KGI, you will then be required to submit official copies.

- Does KGI offer fee waivers for the application fee?
  We do occasionally offer fee waivers for students that have financial need or through special communication to prospective students. If you have a financial need and would like to request a fee waiver, then please reach out to your Admissions Counselor.
- Do I have to submit all of my application materials together?
  While submitting all materials together with the online application expedites the admissions process, you may submit materials during the online application process or after you have submitted the online application. After you submit the online application, you may then log into your application portal and upload your required documents. We will also accept recommendation(s) and mailed materials (test scores, transcripts) after you submit your application. Applicants will receive emailed status updates on the items needed to complete their applications.

- What are the minimum test scores and GPA requirements for admission?
  We pride ourselves on a holistic application review process requiring a written statement of purpose and admissions interview. This means that we look at each applicant as an individual and review your GPA alongside your other materials to get a full picture of your academic and personal background and determine your fit at KGI. While we do not have rigid minimum requirements, we find that successful applicants typically demonstrate

strong academic preparedness, a clear commitment to their chosen field, and alignment with KGI's mission and values.

- Can I transfer credit from another program to KGI?
  KGI does not typically accept transfer credit due to the unique nature of our courses. However, con- tact your Admissions Counselor for questions about specific courses.

- What if I can't find the answer to my question?
  Please contact us! We are here to help. You can reach the Admissions Office at admissions@kgi.edu or 909.607.8590.

International Applications

Here at KGI, we take pride in our rich cultural diversity. We believe that the future leaders of life sciences are best prepared by sharing common knowledge with people from different backgrounds. We are committed to assisting you throughout your time with us and invite you to explore just some of the reasons KGI is a smart choice for international students.

Professional and Personal Development

Several learning opportunities to help you prepare for the workforce upon graduation from KGI. Our employment workshops educate you about the rules and procedures relating to working in the U.S., including Curricular Practical Training (CPT), Optional Practical Training (OPT) employment, and academic training.

Resources

Whether you're an admitted student or a current student, we have helpful resources for you! You can learn about specific immigration policies and procedures, download checklists to guide you through immigration procedures, and obtain forms needed to conduct immigration transactions. You'll find the proper forms on our Admitted Students or Current Students pages and are welcome to explore these resources now.

Our International Student Advisor is available to answer questions and advise you on procedures relating to immigration, employment, and social security, among other topics. Contact interna- tional@kgi.edu or 909.607.7176, Monday-Friday, 8 a.m.-5 p.m.

English Language Proficiency and Requirements
To ensure your academic success at KGI, you must demonstrate English proficiency during the application process. Proof of English proficiency is required if English is not your native language and you have not met the requirement through the satisfaction of any of the options in item 1 (below), regardless of residency or visa status. There are two ways to demonstrate and fulfill the English proficiency requirements:

1. Interview-Based Assessment
Applicants may demonstrate English proficiency by completing an admissions interview, either in person or virtually with their camera on. Interviews allow the admissions team to assess your ability to understand and respond to questions clearly, thoughtfully, and in real time without the use of translation tools or artificial intelligence assistance.

During the interview, the evaluator will assess your English comprehension and communication skills based on your ability to:

- Understand and respond to questions appropriately
- Communicate ideas clearly and cohesively
- Engage in professional-level academic conversation

This method ensures that applicants possess the necessary language skills to thrive in an English-speaking academic environment.

2. English Language Testing

You can demonstrate English proficiency by submitting a TOEFL, IELTS, or Duolingo score report that meets or exceeds the requirements listed below. The university considers the component scores for admissions.

TOEFL iBT	IELTS	Duolingo
85	7.0	120

Policies and Procedures for Technical Standards

KGI is committed to providing degree programs without regard to disability, while assuring that academic and technical standards are met. Technical standards represent the essential nonacademic requirements that a student must demonstrate to participate successfully in KGI's certificate and degree programs and meet the professional competency requirements. Students must demonstrate competence in intellectual, physical, and social tasks that represent fundamentals of being able to successfully complete the program's curriculum and pursue any career path in professional practice. Thus, the standards are prerequisites for admission, continuation, and graduation from KGI. The pro- gram faculty will monitor the student's ability to meet these standards. KGI will consider for admission any applicant who demonstrates the ability to perform or to learn to perform the skills listed in the Technical Standards for which the student has applied. All applicants are held to the same aca- demic and technical standards of admission and training, with reasonable accommodations as needed for students who have registered with accessibility services. KGI reserves the right not to admit any applicant who cannot meet the Technical Standards set for each program with reasonable accommodations. Applicants are not required to disclose the nature of their disability(ies), if any, to the Admissions Committee. To matriculate into a program, the applicant must sign the Technical Standards Certification Form documenting their ability to meet the standards. This form is part of the supplemental application. However, if a student cannot demonstrate the necessary skills and abilities, it is the responsibility of the student to request an appropriate accommodation. Any applicant with questions about the technical standards is strongly encouraged to discuss the issue with The Division of Student Affairs and/or the Vice President of Academic Affairs prior to the interview process. If ap- propriate, and upon the request of the applicant/student, the school will consider technological and other facilitating mechanisms needed to train and function effectively as a professional student.

Candidates for any KGI program must be able to perform the essential functions set by their programs in order to complete graduate training.

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Financial Aid

Financial aid is available to incoming and returning students to support enrollment in KGI's programs. KGI prioritizes transparency and a strong student service relationship to help students make informed decisions.

Types of Funding

KGI offers various types of financial assistance to students enrolling in degree and certificate pro- grams. To view the specific financial assistance offered and how to apply, visit Financing Your Studies.

Federal Loans

The U.S. Department of Education has three federal student loan programs offered to KGI students: Direct Subsidized, Direct Unsubsidized and Direct PLUS Loans.

For more information, please refer to Financing Your Studies - Federal Loans.

Private Education Loans

KGI students who need to apply for a private loan must be credit-worthy or have a co-signer to assist with the credit review. For more information, refer to Financing Your Studies - External Funding.

KGI International Student Loan

KGI offers a student loan to help international students in degree-seeking programs offset the tuition costs at KGI. If interested, refer to Financing Your Studies - International Student Loan.

Scholarships

Scholarships are a type of aid that does not need to be repaid after you graduate. Scholarships include Merit, Need-Based, and Named & Endowed awards which are determined at the time of admission. For more information, refer to Financing your Studies - Financial Aid and Scholarships.

Federal Work-Study

Offered by the Department of Education, Federal Work-Study provides KGI students the opportunity to work part-time to gain work experience and allow them to help pay for their educational needs. KGI's Financial Aid Office administers the Federal Work-Study Program in collaboration with Human Resources. Work-study funds need to be earned over the semester in which the student will be paid directly on a bi-weekly basis.

Veteran's Education Benefits

KGI students who have been or are currently serving in the military may be eligible for VA Educational Benefits. Some benefits are also available to spouses or dependents of veterans. For more information, please refer to Veteran's Education Benefits.

Disbursements

The various forms of aid administered by the KGI Financial Aid Office are credited directly to the student account to offset billed tuition and fees. Eligibility must be verified according to institutional and federal guidelines prior to disbursement. Any required and outstanding documents will be listed on the student's KGI Student Portal. Once students are registered and meet the requirements for disbursement, aid will be disbursed.

Federal Entrance Counseling

Entrance Counseling is required before you can receive your first Direct Subsidized Loan or Direct Un- subsidized Loan as an undergraduate or your first Direct PLUS Loan as a graduate/professional student. For more information, refer to FSA Entrance Counseling Requirement.

Federal Exit Counseling

Exit Counseling is required when you graduate, leave school, or drop below half-time enrollment. Exit counseling provides important information you need to prepare to repay your federal student loan(s). For more information, refer to FSA Loan Exit Counseling.

Loan Disclosures

Federal loan disclosure statements are published by the U.S. Department of Education. It provides comprehensive information about the type(s) of loans borrowed during enrollment at an institution. Even if you do not graduate or find a job, student loans must be repaid with interest. There are several repayment options. For instance, you may pay consistent, monthly installments until the loan is paid off or you may pay variable amounts based on your income. Your promissory note will describe the repayment options that apply to your loan. Retain all records about your student loan(s), including the promissory note, proof of payments, and any correspondence with the lender or loan servicer. For more information, refer to Loan Acknowledgements for Federal Student Loans.

Private Education Loans are credit-based consumer loans that can be used for educational-related purposes. Many lenders have both fixed and adjustable rate loan options.

KGI is partnered with FASTChoice to make it easier for you to determine which private student loan best meets your needs. For more information, refer to Disclosure Requirements for Private Education Loans.

Eligibility for Financial Aid

To support inquiries on financial aid for all students, we provided information on the basic eligibility requirements that will guide the application process during your time at KGI. For more

information, refer to Eligibility.

Satisfactory Academic Progress Policy for Financial Aid Recipients

To be eligible for federal aid, KGI students are required by the U.S. Department of Education (34 CFR 668.34) and KGI policy to maintain Satisfactory Academic Progress toward their degree objectives. KGI has established a SAP Policy to ensure student success and promote timely advancement towards their degree. For more information, refer to Eligibility – Satisfactory Academic Progress.

Withdrawals and the Return of Title IV Funds

Return of Title IV funds (R2T4) requirements govern the return of “unearned” federal student aid when a student withdraws from all Title IV courses before completing a term.

When distributing student financial assistance, the federal government assumes students will complete the entire academic term for which they’ve received aid. After withdrawing, students typically become ineligible for the entire aid package the institution originally awarded. Therefore, when a student withdraws, the institution must report it and determine how much Title IV aid that student “earned” using R2T4 calculations.

Schools determine the “earned” and “unearned” portions of Title IV aid as of the student’s withdrawal date using a prorated schedule for the first 60 percent of the term. However, if the academic term is more than 60 percent completed at the time the student withdrew, then the student has “earned” 100 percent of the Title IV funds he or she was slated to receive during that period. After calculating the student’s earned Title IV aid, the institution must return, and notify the student, of the unearned aid. For more information on R2T4, refer to FSA Handbook Volume 5/Chapter 1.

Helpful Tips

The following information may provide students with a better understanding of the financial aid process during their enrollment at KGI. For more information, refer to Helpful Tips.

FAQs

The following compilation of commonly asked questions is provided for all interested students to review for support. Please refer to FAQs. If a concern is not listed, please contact the Office.

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Office of the Registrar

The Registrar's Office maintains academic data and provides services related to academic records and registrations for students, faculty, and administration at KGI.

Official Transcripts

If you are a current or former student, the Registrar's Office can process your request for an official transcript.

Electronic or Paper Transcripts – National Student Clearinghouse

Please visit the National Student Clearinghouse (NSC) to order your official transcript. Our Registrar Office utilizes NSC to process the majority of our requests and can provide electronic or paper transcripts. Please note that official transcripts are $12.75 – $13.25 per transcript, paid online.

If you've already ordered your transcript(s) through the NSC, you can check the status of your order here.

Benefits of NSC Ordering:

Both traditional sealed paper and electronic certified .PDF transcripts are available (a blue ribbon on the notification bar across the top of Adobe reader ensures the recipient the digital signature is authentic and the contents of the eTranscript has not been altered). Benefits include:

- Students and alumni can request official transcripts at their convenience, 24/7 online
- Secure credit card processing
- FERPA Compliant
- Automatic notifications are sent when the transcripts are processed and received therefore, reducing the anxiety of the transcript status
- Students can place a request during the semester and select the option to send after final grades have been posted, avoiding last minute requests
- Orders are typically processed within 1-3 business days

KGI Paper Transcripts

To request an official transcript be printed at the campus level, please inquire with the Office of the Registrar at registrar@kgi.edu.

Please note that only transcripts printed on official KGI transcript paper are considered official. PDFs or other variations of transcripts are not considered official.

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Forms and Documents

To access forms and documents for the Office of the Registrar, please refer to forms & documents.

Graduation Requirements

To learn what requirements you need to graduate with your degree from KGI, please refer to Graduation Requirements.

For further questions related to the Office of the Registrar, please refer to the Registrar FAQ page.

Student Affairs

The Student Affairs Division is dedicated to fostering a vibrant and inclusive community through engagement, professionalism, and wellness. We strive to create an environment where every student feels a sense of belonging, and is empowered to thrive academically, personally, mentally, physically, spiritually, and socially. By promoting active participation, upholding the highest standards of con- duct, and prioritizing holistic well-being, we support the development of responsible, compassionate, and successful individuals prepared to make meaningful contributions to society.

For further information on student policies, procedures, and resources, please refer to the 2025-2026 Student Handbook.

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Student Accounts

Tuition and Fees

Tuition is payable prior to the first day of classes unless special arrangements are made for installment payments as described below.

These fees are based upon current information available at the time of publication and are subject to possible later change. The Institution reserves the right to change without notice any of the terms stated herein.

2025–2026 Academic Year Tuition

Henry E Riggs School of Applied Life Sciences

	Continuing Students		New Students	
Program	Term	Total Annual Tuition	Term	Total Annual Tuition
Master of Business and Science	$22,000	$44,000	$18,500	$37,000
Master of Engineering in Biopharmaceutical processing	$22,000	$44,000	$18,500	$37,000
Master of Science in Applied Life Sciences	$22,000	$44,000	$22,000	$44,000
Master of Science in Translational Medicine	$22,000	$44,000	$22,000	$44,000
Master of Science in Medical Device Engineering	$22,000	$44,000	$22,000	$44,000
Master of Science in Regulatory Affairs	$22,000	$44,000	$22,000	$44,000

Master of Science in Human Genetics and Genomic Data Analytics	$23,300	$46,600	$23,300	$46,600
Master of Community Health Administration (per unit)	$1,070	—	$1,070	—
Master of Biotechnology Management (per unit)	$1,070	—	$1,070	—
Doctor of Philosophy in Applied Life Sciences	$16,700	$33,400	$16,700	$33,400
Postbac Pre-medical Certificate	$17,700	$35,400	$17,700	$35,400
Postbac Pre-PA Certificate	$17,700	$35,400	$17,700	$35,400
Certificate in Bioscience Management (per unit)	$1,070	—	$1,070	—
Certificate in Applied Genomics	$710	—	$710	—

2025–2026 Academic Year Tuition
School of Pharmacy

	Continuing Students		New Students	
Program	Term	Total Annual Tuition	Term	Total Annual Tuition
Doctor of Pharmacy	$24,950	$49,900	$24,950	$49,900

2025–2026 Academic Year Tuition
School of Health Sciences

	Continuing Students		New Students	
Program	Term	Total Annual Tuition	Term	Total Annual Tuition
Master of Science in Human Genetics and Genetic Counseling	$23,500	$47,000	$23,500	$47,000
The Chan Family Master of Science in PA Studies	$18,365	$55,095	$18,365	$55,095
Doctor of Occupational Therapy	$17,300	$51,900	$14,500	$43,500

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Other Fees

Late Payment Fee	The greater of 1% of the past due student account balance or $50
Returned Check Fee	$25.00
Transcript Fee	$12.50 per transcript
Degree Verification Fee	$10.00 per verification
Enrollment Verification Fee	$5.00 per verification for current students $10.00 per verification for former students/alumnus No fee will be charged for in-school deferment forms for student loans
Parking Fee	$100.00 per year
Replacement Diploma Fee	$50.00 per semester for replacement diploma/certificate

Returned Items

A “return check fee” of $25 is assessed for a check or electronic fund transfer returned by the bank for any reason.

Late Fee Policy

Late Payment Fees are accrued on a weekly basis through the Add/Drop deadline beginning with the first business day following the payment deadline at the greater of 1% of the outstanding balance or $50. After the Add/Drop deadline, fees will accrue monthly. Unpaid fees from offices at The Claremont Colleges Services (TCCS), including the Student Health Center, Library, and Campus Safety are added to KGI student accounts and, also, are subject to accrue the late fee.

Any unpaid balances may result in removal from registered classes and student systems/programs such as Canvas and Student Government activities. Furthermore, a hold will be placed on diplomas and registration until your outstanding balance is paid in full.

Obligation for Payment

Request for registration constitutes a legal financial obligation to which students will be held liable if they do not follow the proper procedure to change or cancel their registration through the Office of the Registrar. Students must receive written confirmation (Leave of Absence or Change of Program form) to verify that their requested change has been made.

By registering, students agree to be held responsible for all tuition and fees, including, but not limited to, payments denied by student loan lenders, agencies of the United States government, and agencies of foreign governments.

Permission to cancel enrollment does not constitute, nor shall it be construed as, a waiver by the institution of a student's financial obligation. Students are still responsible for all outstanding debts and contracts with the institution. Furthermore, students must not have any delinquent financial obligations to KGI at the time classes begin or their registration may be revoked.

Billing Information

Billing notifications on all active student accounts are emailed to the student's official KGI email address (ends in @kgi.edu). KGI does not mail printed statements to currently enrolled students.

In accordance with the Family Educational Rights and Privacy Act, institution representatives will not disclose any specific information about a student's account to any third party (including family members) without the student's permission.

Although the institution will accept payments from a third party, the student is responsible for settling all debts to the institution by the appropriate deadlines.

Payment Methods

You can choose to make your payment using either a credit card or check, depending on your preference. Click here to explore the available payment options and view further instructions.

KGI Installment Plan

The KGI Installment Plan, administered by the Student Account Office, enables students to pay tuition in monthly installments rather than in a single payment at the beginning of the term. Payments are made over a four-month period for each term, beginning September 1st in the fall term and February 1st in the spring term. Installment Plans are not available for summer terms. Upon enrollment, you will be charged a $25 installment plan fee, due upon your first installment payment. In addition, a 1% interest fee based on your principal amount is due with each monthly installment. If a student would like to enroll, they should email the Student Accounts Office at student_accounts@kgi.edu to enroll and receive further information.

KGI Refund Policy

Students who withdraw during a term may be eligible for tuition refunds, depending upon the time of the withdrawal. Students must give written notification to the KGI Registrar's Office of their decision to withdraw and complete the withdrawal procedures in order to be eligible for any refunds.

In cases of withdrawal, KGI reduces tuition, fees, and scholarships according to the schedule below. Date of withdrawal is defined as the date that the KGI Registrar's Office receives a signed statement of withdrawal from the student.

In compliance with the U.S. Department of Education, reductions of federal student loans are calculated and processed by the KGI Financial Aid Office. Please view the Financial Aid section for more information.

Note: If a student has already received checks from KGI for credit balances on student tuition accounts before withdrawal, the student will be required to reimburse KGI for all or part of the original credit balances.

Date of Withdrawal	Refund Percentage
Through Add/Drop Deadline	Full refund
After the second week through the third week of classes	75% refund
After the third week through the sixth week of classes	50% refund
After six weeks	No refund

Refund Checks

Students who have a credit balance on their student account will receive a refund within 14 days of financial aid or overpayment being applied to their student account. Refunds will not be available prior to the start of the 1st day of classes for each term.

You may track your student account activity and refund check availability through the KGI student portal. In addition, you will receive an email from the Student Account Office denoting that your re- fund check has been mailed.

Questions

If you have any questions regarding the contents of this catalog, please contact provost@kgi.edu.

As you embark on this exciting chapter of your academic journey with us at KGI, we want you to know that we're here to support you every step of the way. This catalog is designed to equip you with the resources, policies, and expectations that will help you succeed both academically and personally. Re- member, you're not alone in this journey—our entire KGI community is eager to see you thrive and achieve your goals. We look forward to witnessing your growth and celebrating your successes throughout your time here. Let's make this a memorable and impactful experience together!