

## 2019-2020 Guide to Restricted Electives for the Global Disease Biology major

The Restricted Electives (REs) are a set of typically upper-division courses with a combined minimum of 25 units that you, as a Global Disease Biology (GDB) student, get to pick and choose. That is why they are called ‘Electives’. The Restricted Electives (REs) give you an opportunity to personalize your GDB experience with classes that provide depth and breadth in one or more focused areas, within the field of health and disease that you are most passionate about.

**How to pick your Restricted Electives?** First, you should know that there are rules on what courses can or cannot be taken as GDB Restricted Electives. That is why they are called ‘Restricted’. These rules are described in this GDB-RE document, so read it carefully, and all the way through. Within the boundaries of these rules, ask yourself the following questions: What courses best fit your interests as a GDB student? What courses will best prepare you for a career that you have in mind for yourself after you graduate from UC Davis with a Bachelor of Science degree in GDB? What courses or combination of courses would you like to highlight in your application to your future employer, medical school, or graduate school? What courses best complement your GDB practicum project? Thinking about these questions will help you articulate and rationalize your choice of Restricted Electives. You should be able to comfortably and confidently explain your choice of GDB Restricted Electives in the context of your short- and long-term professional and educational goals. Remember, a carefully-chosen, well-balanced set of Restricted Electives can enhance the appeal of your career portfolio.

**When to start picking your Restricted Electives?** We recommend that you start thinking about Restricted Electives as soon as you enter the GDB major. Browse the UC Davis General Catalog or Course Supplement (<http://catalog.ucdavis.edu/index.html>) for courses that look interesting to you. Talk to fellow GDB students, GDB peer advisors and GDB staff advisors. Contact course instructors and ask if they would be willing to send you their syllabus so you can learn more about course content. Bring up the topic of Restricted Electives in discussions with your GDB faculty advisor: based on your description of post-GDB career goals, he/she may advise you to take a class in advanced statistics, human anatomy, or scientific writing. Faculty advisors may not know about specific classes, but they can guide you in the right direction. Start a draft list of Restricted Electives and update this list as you learn about new classes and talk to people. You may use the GDB-RE Worksheet for this purpose (see Appendix C).

The time to formalize your choice of GDB Restricted Electives is the quarter in which you take GDB 187. As part of this class, you will finalize and submit your list of Restricted Electives, together with a time schedule for when you plan to take (or are already taking, or have taken) these courses and a concise justification for your selection of courses. Your submission will be reviewed by the GDB Advising office towards the end of your GDB 187 quarter. It will be assessed for compliance with the rules described below, for potential conflicts in course scheduling, and for the strength and logic of your justification. If there are problems with any of these, you will have an opportunity to submit a revised list of Restricted Electives. It is important that you get your list reviewed by your GDB 187 final exam date: without review, there can be no approval, and without approval, you may receive an Incomplete for GDB 187. Any changes to your list of Restricted Electives after it is approved in GDB 187 are subject to review. For this, you must send an email with the subject line ‘petition to change Restricted Electives’ to the GDB Advising office.

**Rules and decisions on GDB Restricted Electives.** There are rules on what courses may be taken as GDB Restricted Electives. These rules are explained below; make sure that you familiarize yourself with them.

Also, be aware that these rules are subject to change. GDB students will receive by e-mail at the start of each academic year, if needed each quarter, an updated version of this ‘Guide to GDB Restricted Electives’ (also known as the GDB-RE document). Very important to understand is that even if you follow all the rules below, your submitted list of Restricted Electives may not be approved, for example if there is no clear justification or the courses are disconnected. Because the decision to approve Restricted Electives is based on your list of REs as a whole, GDB advising staff may not respond to questions regarding whether or not an individual class is eligible as a Restricted Elective.

**Courses pre-approved as eligible.** Appendix A is a list of upper-division courses (100-189) that appear in the online UC Davis General Catalog or Course Supplement (<http://catalog.ucdavis.edu/index.html>) and that are pre-approved as being eligible as Restricted Electives for GDB. You do not need approval from the GDB Advising office to include any of these courses as GDB Restricted Electives. However, opting for P/NP grading on any one of these courses disqualifies them as GDB Restricted Electives. In other words, you need a letter-grade if you want to list courses from Appendix A as Restricted Elective. Appendix A is subject to change: courses listed in the appendix may be added or removed. The most current version of Appendix A can be found in the most current version of the GDB-RE document shared with students.

It is important to note that students are not restricted to choose only courses listed in Appendix A. The courses listed there just happen to be classes that have been popular RE choices with GDB students that came before you. We offer students every opportunity to personalize their list of REs, and to add courses to Appendix A. The mechanism to do so is described below. It is also important to know that there are reasons why certain classes cannot be taken as REs, and that we allow certain exceptions, as explained below. Be sure to read the **VERY IMPORTANT** notice that immediately follows this list of reasons and exceptions.

Reason #1: It is a **lower-division course (0-99)**.

Exception #1: You are allowed to include **up to 3 units of lower-division courses**. However, these courses must be taken for a letter grade. This means that courses that are listed as ‘P/NP only’ are not eligible, and you cannot include courses that are letter-graded but you opted for ‘P/NP’ grading.

Exception #1 allows you to include as Restricted Elective a letter-graded lower-division course that is a prerequisite for one of your upper-division Restricted Electives. Note: we do not accept lower-division language courses as Restricted Electives.

Reason #2: It is one of the **EAP192/UWP198 Global Health Internships Abroad** listed on <https://studyabroad.ucdavis.edu/programs/internships>, under the heading GLOBAL HEALTH.

Exception #2: You may list one of these EAP192/UWP198 Global Health Internships Abroad as Restricted Electives (**4 units for EAP 192 and 2 units for UWP198**). These internships are graded P/NP. Students must contact GDB Advising office prior to applying or enrolling in one of these internships and discuss impacts on course schedule.

Reason #3: It is a **variable-unit upper-division course** (i.e. ending in 190-199).

Exception #3: **Up to 3 units** are allowed, but they **must be health/disease-related** and you must provide a strong justification for the units that you picked. Courses may be letter-graded or graded as P/NP. This can include research units ending in 192 or 199, if the research is related to your practicum project or providing you with skills you will use in your future career or future practicum project.

Reason #4: It is an **upper-division laboratory course** (ending in 'L').

Exception #4: You are allowed **up to 6 units** of laboratory courses, but they have to be letter-graded. Lab courses that are graded P/NP are not eligible as Restricted Elective.

Reason #5: It is an **upper-division course that is offered P/NP only and is not a variable-unit or laboratory course** (i.e. not ending in 190-199 or in 'L').

Exception #5: You are allowed **up to 1 unit** of this type of course. This exception allows you to take a class like IDI 141: Infectious Diseases or SPH 190: Topics in Public Health.

Reason #6: It is a **graduate course**.

Exception #6: You are allowed up to **3 units**, but the course(s) must show a letter grade (i.e. not allowed are courses that are 'P/NP only' or courses that are letter-graded but taken P/NP).

Reason #7: It is a **course that is not offered at UC Davis**.

Exception #7: You may petition to include **up to 8 units** of your course work at a higher-education institution other than UC Davis. You will need to provide the GDB Advising office with details on the course (institution, syllabus, grading) and identify a course in the UC Davis General Catalog or Course Supplement for which the non-UC Davis course would be an appropriate substitute. The responsibility for building the case in favor of allowing a non-UC Davis course as a Restricted Elective lies with the student; the GDB Advising office does not have the time or resources to do this for you. Approval of your petition by GDB is not guaranteed, and you may need additional approval at the University and College level. Plan ahead if you are interested in pursuing this exception.

Reason #8: It is a course that is listed in Appendix B of courses **ineligible as Restricted Elective**.

**No exceptions.** Appendix B includes GDB core courses, discussion sections (courses that end in 'D'), and EAP192/UWP198 internships that are not Global Health internships, among others. Appendix B is subject to change: courses listed in the appendix may be added or removed. The most current version of Appendix B can be found in the most current version of the GDB-RE document sent out to GDB students.

Reason #9: It is a letter-graded, upper-division course that appears in the UC Davis General Catalog or Course Supplement, that is not listed in Appendix B, and to which Reasons #3-5 do not apply. If you choose to include a course like this on the list of GDB Restricted Electives that you submit in GDB 187, you will need to include a written justification for why you think this course should be allowed as a Restricted Elective. If approved, the course will be added to Appendix A; if not, it will go on Appendix B.

## **VERY IMPORTANT**

- a) The total number of units added as Restricted Electives under Exceptions #1 through 6 may not exceed 9 units. For example, you may not list two 2-unit variable-unit courses AND a 3-unit laboratory course AND a 4-unit graduate course, as that totals  $(2 \times 2) + 3 + 4 = 11$  units, which exceeds 9 units.
- b) In the list of your Restricted Electives, the total number of units from P/NP courses may not be greater than 8.
- c) The number of courses on the list of Restricted Electives should be 5 or more.

- d) Your choice of Restricted Electives should not only pass the rules that we outlined in this GDB-RE document, but should also comply with those of the College of Agricultural and Environmental Sciences as they pertain to all of your course work (<http://catalog.ucdavis.edu/ugraded/agreqt.html>).
- c) We encourage students to take advantage of Exceptions #2-4 because they represent opportunities for you to get hands-on lab and/or field experience in your area of interest.
- d) Your list of Restricted Electives may exceed 25 units, but the total number of units added as Restricted Electives under Exceptions #1 through 6 may not exceed 9 units.
- e) Prerequisites for any of the courses that you list as Restricted Elective should be noted carefully; the responsibility for meeting these requirements lies with you as a student.
- f) In choosing your Restricted Electives, be aware of the rule that if you are minoring in another discipline, only one GDB course (and that includes any GDB Restricted Elective) is allowed to overlap with a minor requirement.
- g) Keep in mind, just because a student had courses approved that are not listed in Appendix A, does not mean that they are automatically approved for other students. Each student must have their own list of approved Restricted Electives on file with the Advising Office by the end of the quarter that they take GDB 187.

## Appendix A

The following courses are eligible as GDB Restricted Electives. This Appendix A is subject to change: courses and exceptions may be added or removed. The most current version of Appendix A can be found in the most current version of the GDB-RE document sent out to GDB students.

ANT 121	Medical Anthropology	EVE 115	Marine Ecology	PLP 123	Plant-Virus-Vector Interactions
ANT 129	Global Health & Medicine	EVE 117	Plant Ecology	PLP 130*	Fungal Biotech/Biochem
ANT 130A	Cultural Dim. of Globalization	EVE 120	Glonal Change Ecology	PLP 140	Ag Biotech Public Policy
ANT 139A	Race, Class, Gender Systems	EVE 131	Human Genet Var Evol	PLP 148	Introductory Mycology
ANT 151	Primate Evolution	EVE 181	Animal-Plant Interaction	PLS 116	Plant Morphology & Evolution
ARE 112	Organization Management	EXB 120	Sports in Amer Society	PLS 144	Trees and Forests
ARE 147	Res/Env Policy Analysis	FST 104	Food Microbiology	PLS 147	California Plant Communities
ASA 132	Health Issues of Asian Amer.	FST 128	Food Toxicology	PLS 152	Plant Genetics
BIM 152	Molecular Control of Biosys.	GDB 103*	The Microbiome	PLS 162	Urban Ecology
BIS 104	Cell Biology	GEL 107	Paleobiology	PLS 174	Micro Safety Fruit & Veg
BIS 181	Comparative Genomics	HDE 100A	Infancy Early Child	PMI 126 <sup>2</sup>	Fund Immunology
BIT 171	Ethics in Biotechnology	HDE 100C	Adulthood and Aging	PMI 127*	Medical Microbiol
CHA 101	Human Gross Anatomy	HDE 117	Longevity	PMI 128*	Biol Animal Viruses
CHE 100	Enviornmental Water Chem	HIS 108	Global Environ History	PMR 100	Research Approaches Disability
CHE 130A	Pharmaceutical Chemistry	HIS 109B	Env Chng Dis & Pub Hlth	POL 107	Environ. Politics and Admin
CHE 130B	Pharmaceutical Chemistry	HIS 110	World History, OneHealth	POL 109	Pub Pol & Gov Proc
CHI 112	Globalization of Chicana/o Com.	HIS 139A	Medieval Renaissance Med.	POL 165	Mass Media & Politics
CHI 114	Reproductive Health	HIS 139B	Medicine Society Culture Mod	PSC 125	Behav Gen & Epigenetics
CHI 121	Chicana/o Comm. Mental Health	HIS 172	Am Environmental History	PSC 126	Health Psychology
CHI 131	Chicanas in Politics & Policy	HMR 134	Human Rights	PSC 135	Cognitive Neuroscience
CMN 120	Interpersonal Commun	MCB 162	Human Genetics Genomics	PSC 168	Abnormal Psych
CMN 161	Health Communication	MIC 105	Microbial Diversity	RST 134	Human Rights
CMN 165	Media and Health	MIC 111	Human Microbiology	SAS 109	Env Chng Dis & Pub Hlth
CRD 149	Commun. Environmental Justice	MIC 162*	General Virology	SAS 110	Applications Evolution
EDU 110	Ed Psych: Gen	MIC 175	Cancer Biology	SAS 120	Sci & Contemp Soc Issues
EDU 142	Intro Environ Educ	MMI 130	Medical Mycology	SAS 121	Global Poverty
ENT 100	Gen Entomology	MMI 188 <sup>2</sup>	Human Immunology	SOC 154	Health and Illness
ENT 104	Behav Ecol Insects	NEM 110	Intro To Nematology	SOC 160	Sociology of the Enviorment
ENT 105	Insect Ecology	NPB 100	Neurobiology	SOC 162	Society, Culture, and Health
ENT 119	Apiculture	NPB 101	Systemic Physiology	SOC 164	Health Policy & Politics
ENT 153*	Med Entomology	NPB 102	Animal Behavior	SPH 101	Intro to Public Health
ENT 156*	Bio Of Paras	NPB123	Comparative Vertebrate Organ.	SPH 102	Intro to Epidemiology
ENT 158	Forensic Ent	NPB 130	Endocrinology	SPH 104	Globalization and Health
ESP 100	General Ecology	NPB 132	Genes Nutrients Health	SPH 113	Health Disparities in the US
ESP 121	Population Ecology	NPB 168	Neurobiol Addict Drugs	STS 121	Medical Anthropology
ESP 165	Climate Policy	NUT 111	Intro to Nut and Metabolism	STS 129	Global Health & Medicine
ETX 101	Principles Environ Tox	NUT 127 <sup>1</sup>	Stress and Development	UWP 101	Advanced Composition
ETX 102A	Env Fate of Toxicants	NUT 130	Expt in Nutrition	UWP 104E	Writing in Science
ETX 103A	Bio Effects of Toxicants	PHI 108	Phil of Biology	UWP 104F	Writing in Health Prof
ETX 110	Toxic Tragedies	PHI 120	Environmental Ethics	WFC 120	Biol Cons Fishes
ETX 127 <sup>1</sup>	Stress and Development	PHI 121	Bioethics	WFC 122	Pop Dyn and Est
ETX 140	Genes and the Environment	PHR 106	Animals in Society	WFC 152	Ecol Human-Wildl Confl
ETX 146	Exposure Assessment	PLB 105	Developmental Plant Anatomy	WMS 182	Global Gender & Culture
EVE 101	Introduction to Ecology	PLB 111	Plant Physiology		
EVE 104	Community Ecology	PLP 120*	Intro Plant Path		

\*Exception: These classes cannot be taken as Restricted Elective if they are selected as a Pathogen/Disease course to fulfill the GDB Depth Subject Matter requirement.

<sup>1,2</sup>These are cross-listed classes or verified similar and cannot both be taken as REs.

## **Appendix B**

The following courses are not eligible as GDB Restricted Electives. This Appendix B is subject to change: courses may be added or removed. The most current version of Appendix B can be found in the most current version of the GDB-RE document sent out to GDB students.

### **1) GDB core courses**

These include GDB 90, SAS 13, PMI129Y, VME158, GDB 101, GDB 102, and GDB 187.

### **2) GDB Preparatory Subject Matter courses**

These include SAS 13, BIS 2A, BIS 2B, BIS 2C, CHE 2A, CHE 2B, CHE 2C, CHE 8A, CHE 8B, CHE 118A, CHE 118B, PHY 7A, PHY 7B, MAT 17A, MAT 17B, MAT 17C, STA 13, STA 100, and PLS 120.

### **3) GDB Depth Subject Matter courses**

BIS 101, BIS 102, BIS 103, BIS 105, EVE 100, MIC 101, MIC 102, MIC 103L, GDB 189, and GDB 189D.

### **4) Any class in the UC Davis General Catalog or Course Supplement that ends in 'D'**

These typically are discussion sections.

### **5) EAP192/UWP198 Internships that are not Global Health Internships Abroad**

These include Business and Communication Internships in Hong Kong and New Zealand and an Engineering Internship in Australia.

### **6) Lower-division courses (0-99) that are P/NP graded only.**

### **7) Courses for which a previous petition to allow them as Restricted Elective was denied**

ITA 108S

ENL 158A

ITA 121S

ITA 145S

SPA 141S

## Appendix C

## **GDB-RE WORKSHEET**

Use this worksheet as your personal draft list of GDB Restricted Electives. Update as needed. Provide course code (e.g. ANT 129), full title (e.g. Health and Medicine in a Global Context), how it is graded (letter or P/NP), the quarter/year you plan to take it or already took it, and the number of units.