

CALS Curriculum Committee Meeting

April 25, 2025

McCarty Hall D Rm. 1044/1045

1:00 p.m.

Via Zoom: <https://ufl.zoom.us/j/355458614>

Meeting ID : 355458614

Members: D. Coenen, T. Easterly, D. Gabriel, B. Gankofskie, V. Hull, P. Inglett, T. Johns, P. Johnson, B. Kassas, R. Koenig J. Larkin, T. Martin, A. Mathews, H. McAuslane, G. Nunez, T. Rashed, J. Scheffler (Chair), B. Schutzman, A. Watson, J. Weeks, A. Wysocki

Agenda and Index for Materials

Approve Minutes from the March 28, 2025 meeting

Dr. Mathews: Update from UCC

Undergraduate New Course Proposal

1. DIE 2002 – Personalized Nutrition (req. #20367)

Curriculum

2. B.S. in Microbiology and Cell Science/Pharm.D. Combination Degree Program CALS (req. #21474)

Discussion

3. What information should be kept on the CALS CC public facing website to be ADA compliant?

4. CALS CC membership

**CALS Curriculum Committee Meeting
Minutes from March 28, 2025
Submitted by James Fant**

Members Present: D. Coenen, T. Easterly, D. Gabriel, B. Gankofskie, V. Hull, P. Inglett, P. Johnson, B. Kassas, R. Koenig, J. Larkin, T. Martin, A. Mathews, T. Rashed, J. Scheffler, B. Schutzman, J. Weeks

Visitors: Jennifer Vogel

Call to Order: The College of Agricultural and Life Sciences Curriculum Committee met in McCarty Hall D Rm. 1044/1045 on March 28, 2025. Dr. Scheffler called the meeting to order at 1:00 p.m.

Previous agenda items and supporting material can be found on the CALS College Committees homepage under document archives: <https://cals.ufl.edu/faculty-staff/committees/>

Approval of Minutes: A motion was made by Dr. Martin to approve the minutes from the February 21, 2025 meeting of the CALS CC. The motion was approved.

All items approved by the committee will be forwarded to either the Graduate Curriculum Committee (GCC), Graduate Council (GC) or the University Curriculum Committee (UCC) once any changes requested are made and the submission is complete.

Links: Grades – <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>
For Graduate Grades – <https://catalog.ufl.edu/graduate/regulations/#text>
Syllabus Statements – https://cals.ufl.edu/content/pdf/Faculty_Staff/CALS-Syllabus-Policy_1.23.25%20v2.pdf
Absences & Make-Ups – <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>
Writing Learning Objectives - https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-course-objectives.pdf.

Dr. Mathews – Update from UCC:

The following items were approved (or conditionally approved and then approved) at the March UCC meeting:

1. ENY 2XXX Bite Me #20353
2. ENY 2XXX Biodiversity #20346
3. FAS Freshwater for the Future #20417
4. WIS 2XXX Connecting Wildlife and Human Health #20350
5. AEC TCH Online modality offered #20857

Announcements:

1. UF Assessment Conference – April 14-16, 2025

2. Course evaluations will open a week earlier given the shortened semester. This is before the final deadline to withdraw from a course. If a student withdraws, their evaluation will be removed before student evaluations are released.
3. Course description template/guidelines - task force work still in progress. No specific timeline given.
4. Please work with your unit/UG coordinator to consider where Quest 3 will go in 8 semester plan as those will need to be updated to include Quest 3 next year.
5. Quest 2 – call for new courses released. Please encourage faculty to develop new courses and teach existing courses.

Graduate Course Change Proposal

1. ANS 6751 – Physiology of Reproduction (req. #20615)

Please be sure to make all requested changes to both the UCC form and syllabus if necessary. A motion was made by Dr. Martin to approve this item with edits required. The motion was approved. The course description in the syllabus does not match the description in the catalog. If there is a change that must be noted on the UCC form. The word “comprehend” needs to be removed from the first sentence in the learning objectives. The course schedule needs to be changed from 16 weeks to 14 weeks. In week two of the schedule the second Tuesday needs to be changed to two. In the grading section of the syllabus exams 2 and 3 need to be changed to 33.33%. Check the syllabus for editorial errors. The most recent version of the CALS syllabus boilerplate needs to replace the version in the syllabus. This can be found at: https://cals.ufl.edu/content/pdf/Faculty_Staff/CALS-Syllabus-Policy_1.23.25%20v2.pdf. Review the comments in Teams for additional information.

Undergraduate New Course Proposal

2. FYC 2XXX – An Ounce of Prevention: Building Resilience in Communities (req. #20349)

Please be sure to make all requested changes to both the UCC form and syllabus if necessary. A motion was made by Dr. Koenig to approve this item with edits required. The motion was approved. The course description in the syllabus and on the UCC form must match. The submission must include a CALS CC Submission Checklist: (https://cals.ufl.edu/content/pdf/Faculty_Staff/CALS%20CC%20Checklist.pdf). The committee is curious if the instructor is also attempting to get this course to count for words towards the university writing requirement and/or Gen-Ed composition due to the word counts on assignments. You may view additional comments in Teams.

Recycled items

3. AEC 5XXX – Effectively Communicating Agricultural and Natural Resources Policy Issues (req. #20649)

A motion was made by Dr. Koenig to approve this item with edits required. The motion was approved. The grading scale and points need to be fixed. The grading scale shows a high of 1100. The assignment points and explanation show 1000, but the points listed total 950. You may view additional comments in Teams.

4. FNR 6XXXX – Lidar Remote Sensing for Forestry Applications (req. #20744)

A motion was made by Dr. Martin to approve this item with edits required. The motion was approved. Realign the header on the first schedule and remove the extra week 15 from the second schedule. You may review additional comments in Teams.

The meeting was adjourned at **1:43** p.m.

Cover Sheet: Request 20367

DIE 2002: Personalized Nutrition (Q2 Perm.)

Info

| | |
|------------------------|---|
| Process | Course New/Close/Modify Ugrad Gen Ed Quest Perm |
| Status | Pending at CALS - College of Agricultural and Life Sciences |
| Submitter | Madison Henry madison.henry@ufl.edu |
| Created | 8/28/2024 10:27:39 AM |
| Updated | 4/23/2025 4:19:08 PM |
| Description of request | Quest 2, Biological Sciences |

Actions

| Step | Status | Group | User | Comment | Updated |
|---------------------------------------|-----------|--|----------------|---|-----------|
| General Education Program Coordinator | Approved | PV - Quest Director | Kendall Kroger | | 8/28/2024 |
| No document changes | | | | | |
| Department | Commented | CALS - Food Science and Human Nutrition 60150000 | Tobin Shorey | SCNS course DIE2002 | 3/27/2025 |
| No document changes | | | | | |
| Department | Approved | CALS - Food Science and Human Nutrition 60150000 | Renee Goodrich | Just received this today and approved at FSHN | 3/27/2025 |
| No document changes | | | | | |
| College | Pending | CALS - College of Agricultural and Life Sciences | | | 3/27/2025 |
| No document changes | | | | | |
| Quest Director | | | | | |
| No document changes | | | | | |
| University Curriculum Committee | | | | | |
| No document changes | | | | | |
| General Education Committee | | | | | |
| No document changes | | | | | |
| Statewide Course Numbering System | | | | | |
| No document changes | | | | | |
| Office of the Registrar | | | | | |
| No document changes | | | | | |
| Student Academic Support System | | | | | |
| No document changes | | | | | |

| Step | Status | Group | User | Comment | Updated |
|--|--------|-------|------|---------|---------|
| Catalog Notified | | | | | |
| No document changes | | | | | |
| College Notified | | | | | |
| No document changes | | | | | |
| General Education Program Coordinator Notified | | | | | |
| No document changes | | | | | |

Course|Gen_Ed|New-Close-Modify|Quest-Perm for request 20367

Info

Request: DIE 2002: Personalized Nutrition (Q2 Perm.)

Description of request: Quest 2, Biological Sciences

Submitter: Madison Henry madison.henry@ufl.edu

Created: 8/28/2024 10:12:48 AM

Form version: 1

Responses

Recommended Prefix DIE

Course Level 2

Course Number XXX

Category of Instruction Introductory

Lab Code None

Course Title Personalized Nutrition

Transcript Title Personal Nutrition

Degree Type Baccalaureate

Delivery Method(s) On-Campus

Effective Term Earliest Available

Effective Year Earliest Available

Rotating Topic No

Repeatable Credit No

Amount of Credit 3 credits

S/U Only? No

Contact Type Regularly Scheduled

Weekly Contact Hours 3

Course Description Can nutrition recommendations be customized for individuals based on their genetic, metabolic, and environmental characteristics? Based on the disciplines of molecular science, dietetics, epidemiology, and data analysis, the course will investigate the causes and consequences of malnutrition, and how dietary or nutrient choices can be personalized to prevent metabolic disease.

Prerequisites Quest 1 course with a "C" or better.

Co-requisites N/A

Rationale and Placement in Curriculum Quest 2 Course

Course Objectives Information is present on attached syllabus.

Course Textbook(s) and/or Other Assigned Reading Information is present on attached syllabus.

Weekly Schedule of Topics Information is present on attached syllabus.

Grading Scheme Information is present on attached syllabus.

Instructor(s) -Laura Acosta

-Zhiyong Cheng

-Diana Taft

Permanent Quest and General Education Approval Yes

Previous Temporary Approval N/A

Which level of Quest will this course be offered under? Quest 2

Approved Colleges - Quest 2 College of Agricultural and Life Sciences (CALS)

Quest 2 Objectives Yes

Quest 2 Student Learning Outcomes Yes

Requested GE Classification for Quest 2 B - Biological Sciences

Requested Writing Requirement Classification None

Course Updates: Temporary vs Permanent requests N/A

Attendance & Make-up Yes

Accommodations Yes

UF Grading Policies for assigning Grade Points Yes

Course Evaluation Policy Yes

CALS Curriculum Committee

Submission Checklist

Updated Sept 2024

NOTE: This checklist must be included with all course and certificate submissions.

The checklist below is intended to facilitate course and certificate submissions to the University of Florida Academic Approval Tracking System (<https://approval.ufl.edu/>). The checklist consists of the most common items that can cause a submission to require changes or be recycled. Contrary to information provided on the UF approval site, the CALS Curriculum Committee requires a syllabus be submitted with each new course or course modification request. Please note that submitters are encouraged to attend the CALS CC meeting at which their item is being reviewed. This allows the submitter to answer any potential questions that may arise that could cause the item to not be approved. Also, be aware that when completing the UCC form the section Description of Request is asking for a brief statement about what you are doing. This is **not** the place for a course description. A statement such as “Proposal of a new undergraduate course” is all that is needed. Please do not submit documents in pdf format. All documents should be submitted in Word to facilitate editing on our end if necessary.

CHECKLIST: PLEASE INITIAL OR MARK N/A FOR EACH STATEMENT TO INDICATE YOUR COMPLIANCE.

 ZC It is required when making a submission that you consult your department’s representative to the CALS CC. A list of current members can be found on the committee site located at: <https://cals.ufl.edu/faculty-staff/committees/>.

 ZC You **MUST** comply with the CALS Syllabus Policy, including items 1 through 8 and all standard syllabus statements. This document can be viewed at the committee site(<https://cals.ufl.edu/facultystaff/committees/>) by clicking on the Curriculum Committee – Information & Documents heading and scrolling down to Forms, Checklists, and Other documents. The other items included here are all very helpful when making a curriculum submission. Some will be mentioned in other checklist items below.

 ZC Submission of a course modification requires both the current version of the course syllabus and the proposed version.

 N/A Joint course submissions must include 1) both graduate and undergraduate syllabuses and 2) a separate document outlining the substantial (more than one) differences in assignments between the two courses. These assignments must account for at least a 15% difference in graded material between the two levels. If this is a new course submission both courses must be submitted for approval simultaneously.

 ZC The course description on the UCC form and in the syllabus must match and should be no longer than 500 characters. Any other information you wish to include needs to be under a different heading such as background or additional course information.

__ZC__ The course learning objectives must be consistent with Bloom's taxonomy. Please see the following link at the CALS Curriculum site. (https://cals.ufl.edu/content/PDF/Faculty_Staff/cals-courseobjectives.pdf). Do not use the words demonstrate or understand when listing learning objectives.

__ZC__ The course schedule should be concise and include the appropriate number of weeks in the semester.

__ZC__ All graduate course submissions must include a reading list if a textbook is not required. The reading list should include at least some current readings (within the last 5 years). All readings do not need to be current.

__N/A__ Outside consultations are required if there is a possibility of the proposed course covering a significant amount of material taught in another department or college on campus. There must be a consult form completed by the chair of the department from who you are seeking the consult. Instructors may provide additional consults. The form can be found at: <https://approval.ufl.edu/policies/external-consultations/>.

__N/A__ Prerequisite courses are required for 3000 and 4000 level courses. This line of the approval form cannot be "none" or left blank. Junior or senior standing is an acceptable option. A phrase such as "a course in basic biology" is not acceptable. (Graduate courses should not have specific courses listed as prerequisites. If needed a statement of skills required prior to taking the course can be provided under other course information.)

__ZC__ Decimal points must be included in the grading scale if grade cut-offs are based on percentages. While this is not a university policy it is a CALS standard practice to avoid any confusion when final grades for the course are determined.

__ZC__ The attendance and make-up policy in a syllabus cannot contradict the university's policy. Do not include any additional wording to this policy. A statement and link regarding this are included in the CALS Syllabus Statements. For the approval process the college suggests a less is more view when it comes to this policy.

__ZC__ The most recent version of the CALS Syllabus Statements boiler plate must be included in all syllabuses. This document is included in the CALS Syllabus Policy and can be copied and pasted to the syllabus. Do not use the boilerplate statements from an old syllabus as they are likely to be out of date.

Certificates

If proposing a new undergraduate or graduate level certificate that includes any courses outside of the submitters department a statement regarding any possible impact on those courses needs to be included. An email from the instructor is acceptable. Also, any courses required for the certificate must have permanent prefixes and course numbers. The submission must include intended catalog copy. (Contact Dr. Anne Mathews (anne.mathews@ufl.edu) for further instruction)

IDS 2935: Personalized Nutrition

Quest 2

I. General Information

Class Meetings

- Fall 2024
- Tuesdays Period 4 (10:40 AM - 11:30 AM), and Thursday Periods 4-5 (10:40 AM - 12:35 PM)
- Classroom: FLG 0265 (Tuesdays); AND 0019 (Thursdays)

Instructors

- Zhiyong Cheng
- FSHN Building (Building 475), Room 265
- Office Hours: Wednesdays 2:00am-3:00pm or by appointment via email
- Email: z.cheng@ufl.edu

- Laura Acosta
- Building 120, Room 105D
- Office Hours: Wednesdays 3:00-4:30pm by appointment. (Please email me at ljacosta@ufl.edu to make an appointment. I will send you a Zoom link, or we can arrange an in-person meeting if you would prefer.)
- Email: ljacosta@ufl.edu

- Diana Taft
- FSHN Building (Building 475), Room 409A
- 30 minutes after class or by appointment.
- Email: dianataft@ufl.edu

Course Description

Can nutrition recommendations be customized for each individual based on their unique genetic, metabolic, and environmental characteristics? This course will grapple with how and where nutrition should fit in an emerging era of precision medicine. We will explore the challenges of malnutrition and the growing epidemic of metabolic disease (e.g., obesity, diabetes, cardiovascular disease, and cancer). Based on the disciplines of molecular science, dietetics, epidemiology, and data analysis (including artificial intelligence), the course will investigate and reflect on the causes and consequences of malnutrition, and how dietary or nutrient choices can be personalized to prevent metabolic disease. Major themes include the molecular determinants of differences among individuals and nutritional contributions, malnutrition and metabolic disorders, and the application of personalized nutrition in

disease prevention. Through a field trip to a local supermarket, food frequency questionnaire, and classroom discussion and debates, students will tackle the question of whether and how personalized nutrition can be applied to address malnutrition and the global epidemic of metabolic disorders. The course will culminate with a project in which students synthesize information and knowledge to develop a mock meal plan for individuals who themselves or whose parents or grandparents experienced malnutrition.

Quest and General Education Credit

- Quest 2
- Biological Sciences

This course accomplishes the Quest and General Education objectives of the subject areas listed above. A minimum grade of C is required for Quest and General Education credit. Courses intended to satisfy Quest and General Education requirements cannot be taken S-U.

Required Readings and Works

Materials and Supplies Fees: n/a

This course has no required textbook, but weekly readings will be posted on Canvas.

Potential trigger warning

As instructors, we are aware that eating disorders exist. We have tried to be sensitive to students, this is why the alternative assignment to the FFQ exists. You can request the alternative assignment for any reason, no explanation required. If you have an eating disorder, we STRONGLY suggest you request the alternative assignment. That said, this is a course on a nutrition and diet, and much of the material can be triggering. If you find yourself struggling with the topics discussed in the class, please let us know as soon as possible and seek professional support from your counselor about if this course is appropriate for you.

II. Graded Work

Description of Graded Work

10 Weekly Quizzes (closed book):

Multiple choice, matching, and fill-in-the-blank style questions

5 points each, lowest score dropped. Missed quizzes may be made up IF a request to make up the missed quiz is made within 7 days.

Total: 45 points (30% of final grade)

Supermarket Field Trip Reflection:

1 page, 400-600 word paper summarizing what you learned from the supermarket field trip, and how you can apply what you learned to your daily life as select your food.

Total: 15 points (10% of final grade)

Food Frequency Questionnaire (FFQ) Analysis:

Complete the DHQ III from the National Institutes of Health. Then complete a worksheet summarizing and synthesizing the results. Alternate assignment is available if completing a Food Frequency Questionnaire is in any way a problem for your health or mental health. Explanation is not required; simply request the alternate assignment.

Total: 15 points (10% of final grade)

Dietary Recommendations:

Read the context information, made dietary recommendations for the individuals described in the context, and explain why the rationales for your recommendations.

Total: 15 points (10% of grade)

In-Class Debate and Position Paper:

Choose from these topics: 1) Should nutrition interventions be applied to everyone (as part of public health initiatives)? 2) Is food medicine? 3) Is the information available to dietitians today enough to design a truly personalized diet? If not, what is needed? If so, what information qualifies? 4) Are current tools to measure dietary intake sufficient to develop personalized nutrition?

Based on class discussions, formulate an opinion. Then, participate in an in-class debate (15 points), presenting and defending your position. (Or, change your mind if the other side was compelling.) After the debate, compose a 500-1000 word position paper (30 points), describing your final stance on the issue and justifying your position scientifically.

Total: 45 points (30% of final grade)

Attendance and Participation:

15 points (10% of final grade)

Grade Breakdown Table

| | | |
|-----------------------------------|--|-------------|
| Quizzes | 10*5 pts each = 50 pts, lowest dropped, 45 pts | 30% |
| Supermarket Field Trip Reflection | 15 pts | 10% |
| Food Frequency Questionnaire | 15 pts | 10% |
| Mock meal plan | 15 pts | 10% |
| In-class debate (group project) | 15 pts | 10% |
| Position paper | 30 pts | 20% |
| Participation | 15 pts | 10% |
| Total | 150 pts | 100% |

Grading Scale

For information on how UF assigns grade points, visit: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

| | | | | |
|----|---------------|--|----|--------------|
| A | 94.0 – 100.0% | | C | 74.0 – 76.9% |
| A- | 90.0 – 93.9% | | C- | 70.0 – 73.9% |
| B+ | 87.0 – 89.9% | | D+ | 67.0 – 69.9% |

| | | | | |
|----|--------------|--|----|--------------|
| B | 84.0 – 86.9% | | D | 64.0 – 66.9% |
| B- | 80.0 – 83.9% | | D- | 60.0 – 63.9% |
| C+ | 77.0 – 79.9% | | E | <60.0 |

Grading Rubrics

Attendance and Participation (Grading Rubric)

| Criteria | Unsatisfactory-Beginning | Satisfactory-Developing | Excellent-Accomplished | Total |
|--|--|--|---|-----------|
| Attendance (3 absences are allowed with no questions asked and no grade penalty. You do not need to provide an explanation or documentation. Absences beyond 3 will be penalized if prior approval is not received). | 2 points 7+ absences (unexcused) | 4 points 4-6 absences (unexcused) | 6 points Besides the 3 penalty-free absences, attended all class sessions or received approval for necessary absences | /6 |
| Contributions to class activities and discussion - Frequency | 1 point Student does not initiate contribution & does not participate without prompting from the instructor. | 2 points Student sometimes initiates contribution, but does so infrequently (fewer than half of the class sessions) | 3 points Student initiates contribution in at least half of the class sessions | /3 |
| Contributions to class activities and discussion - Quality | 1 point Comments are uninformative and lacking in appropriate terminology. Heavy reliance on opinion and personal taste. | 2 points Comments are sometimes constructive, but not always relevant to the discussion. Student sometimes uses appropriate terminology. | 3 points Comments are mostly insightful & constructive; student mostly uses appropriate terminology. | /3 |

| Attentiveness | 1 points | 2 points | 3 points | /3 |
|----------------------|--|--|--|------------|
| | Does not listen to others; regularly talks while others speak or does not pay attention while others speak; detracts from discussion; sleeps, etc. | Student is mostly attentive when others present materials and perspectives, but sometimes needs to be reminded of the class focus. | Student listens attentively when others present materials and perspectives, as indicated by comments that build on others' remarks, i.e., student hears what others say & contributes to the dialogue. | |
| | | | | /15 |

Adapted from Carnegie Mellon (The point values and distribution are weighted by the relative contribution of each item to class success)

Debate (Grading Rubric, Group-based grade*)

| Criteria | Unsatisfactory-Beginning (1 point) | Satisfactory-Developing (2 points) | Excellent-Accomplished (3 points) | Earned Points |
|---------------------|--|---|--|----------------------|
| Information | Some information was accurate and credible, but there were some minor inaccuracies | Most information was clear, accurate, and credible, but was not usually thorough | All information was clear, accurate, credible, and thorough | /3 |
| Rebuttal | Some counter arguments were weak and irrelevant | Most counterarguments were accurate, relevant, but several were weak | All counterarguments were accurate, relevant and strong | /3 |
| Use of facts | Some points were supported well, others were not | Every major point was supported with the highest quality of evidence but the relevance of some was questionable | Every major point was well supported with the highest quality evidence | /3 |
| Organization | Some arguments were tied to the topic but not logical in presentation | Most arguments were clearly tied to the topic but not | All arguments were clearly tied to the topic and organized in a tight, logical fashion | /3 |

| | | | | |
|-----------------------------------|--|--|--|----|
| | | organized in a tight, logical fashion | | |
| Understanding of topic | The team seemed to understand the main points of the topic, but didn't present with ease | The team seemed to understand the main points of the topic and presented those with ease | The team clearly understood the topic in depth and presented their information forcefully and convincingly | /3 |
| Total (15 possible points) | | | | |

Adapted from <http://course1.winona.edu/shatfield/aire/classdebate.pdf>

** A signed statement of the % (a) and details of contribution is required from each student in a group. In the meantime, a peer evaluation will be implemented to let others in the group member rate the % (b) of contribution. The average of items (a) and (b) will be calculated for each student. If your average is less than 15% (in reference to 25% in a 4-person group), you will lose one point from the group grade per 5%: i.e., if your average is 10-14%, you will lose 1 point, 5-9% you will lose 2 points, 1-4% you will lose 3 points. If a student does not have a defined contribution to the project, they will earn a 0.*

(The point values and distribution are weighted by the relative contribution of each item to the project)

Position Paper (Grading Rubric, Individual Grade)

If student performance is sufficiently low for any criteria, instructors reserve the right to assign a zero for that category. For example, a reference that does not exist will result in a 0 for depth of content.

| Criteria | Unsatisfactory-Beginning (2 points) | Satisfactory-Developing (4 points) | Excellent-Accomplished (6 points) | Earned Points |
|-------------------------|--|---|--|---------------|
| Organization | Paper is poorly organized and difficult to follow. | Paper is generally clear and well organized. A few minor points were confusing. | Paper is clear, logical, and organized. Easy to follow line of reasoning. | |
| Depth of Content | Background information not provided, paper not justified, objective not stated, and explanations of key concepts with support from the literature and explanations of research related to topic inaccurate or incomplete. Little attempt made to tie | Some background information provided, objective not stated, explanations of key concepts with support from the literature and explanations of research related to topic mostly accurate and complete, but weak in some areas. | Extensive background information provided, objective clearly stated, explanations of key concepts with support from the literature and explanations of research related to topic very accurate and complete. | |

| | | | | |
|---|---|---|---|--|
| | research papers together. | | | |
| Quality and citation of evidence or literature | The evidence was not credentialed or peer reviewed. Citation of was not accurate. | Most evidence was credentialed/peer reviewed. Citation was accurate in general but with a few errors. | All evidence was credentialed or peer reviewed. Citation was accurate. | |
| Formatting | Most sections of the paper did not follow the formatting instruction. | Most sections of the paper followed the formatting instruction, with a few areas that need reformatting. | All sections of the paper followed the formatting instruction, with a few areas that need reformatting. | |
| Grammar/Word Choice | Sentences are often incomplete, and grammatical errors are evident throughout the paper. Paper does not flow well at all. | For the most part, sentences are complete, grammatically sound. Some sections of the paper flow well, however others appear choppy. | Sentences are consistently complete and grammatically sound. The paper flows well throughout. | |
| Total points (30 possible points) | | | | |

(The point values and distribution are weighted by the relative contribution of each item to the paper)

** A signed statement of the % (a) and details of contribution is required from each student in a group. In the meantime, a peer evaluation will be implemented to let others in the group member rate the % (b) of contribution. The average of items (a) and (b) will be calculated for each student. If your average is less than 15% (in reference to 25% in a 4-person group), you will lose one point from the group grade per 5%: i.e., if your average is 10-14%, you will lose 1 point, 5-9% you will lose 2 points, 1-4% you will lose 3 points. If a student does not have a defined contribution to the project, they will earn a 0.*

(The point values and distribution are weighted by the relative contribution of each item to the project)

Note: Lack of submission will result in zero point.

Supermarket Field Trip Reflection (Grading Rubric, Individual Grade)

If student performance is sufficiently low for any criteria, instructors reserve the right to assign a zero for that category. For example, if a student does not attend the field trip and does not obtain the information covered, analysis will likely score 0 because it will be disconnected from the material covered.

| Criteria | Unsatisfactory-Beginning (3 points) | Satisfactory-Developing (4 points) | Excellent-Accomplished (5 points) | Earned Points |
|-----------------|--|---|--|----------------------|
|-----------------|--|---|--|----------------------|

| | | | | |
|-----------------------------------|--|---|--|--|
| Completeness | Addresses the assignment prompt, but only partially. OR Does not adhere to required length. | Almost completely answers the assignment prompt. Adheres to required length. | Clearly and completely answers the assignment prompt. Adheres to required length. | |
| Analysis | Slight or unclear attempt to integrate relevant facts, relationships, and the student's self. | Clear attempt to integrate relevant facts, relationships, and the student's self. | Clear integration of relevant facts, relationships, and the student's self. Includes insightful conclusions and synthesis of ideas, including how new learning can be applied to personal behaviors and choices. | |
| Writing | Includes observations but no critical reflection. Acceptable spelling and grammar with some errors. | Includes observations with some critical reflection. Good spelling and grammar with only minor errors. | Includes observations with excellent critical reflection (i.e. exploration and critique of assumptions, beliefs, and/or biases). Excellent spelling and grammar with no or minimal errors. | |
| Total (15 possible points) | | | | |

Adapted from: USC Center for Teaching Excellence. Lack of submission will result in zero point.

(The point values and distribution are weighted by the relative contribution of each item to the project)

Dietary Recommendations (Grading Rubric, Individual Grade)

If student performance is sufficiently low for any criteria, instructors reserve the right to assign a zero for that category. For example, a reference that does not exist will result in a 0 for analysis.

| Criteria | Unsatisfactory-Beginning (3 points) | Satisfactory-Developing (4 points) | Excellent-Accomplished (5 points) | Earned Points |
|---------------------|--|---|---|----------------------|
| Completeness | Answered the questions partially. | Answered the questions completely. | Answered the questions completely and convincingly. | |

| | | | | |
|-----------------|---|--|--|--|
| Analysis | The rationales were weak, lacked logic and evidence, and dissociated from the recommendation | The rationales integrated evidence and partially support the recommendations | The rationales were logical, integrated evidence, and fully support the recommendations | |
| Writing | Acceptable spelling and grammar with some errors. Did not adhere to the formatting guideline. | Good spelling and grammar with only minor errors. Adhered to the formatting guideline. | Excellent spelling and grammar with no or minimal errors. Adhered to the formatting guideline. | |

III. Annotated Weekly Schedule

| Week | Topics, Homework, and Assignments |
|---------|--|
| Week 1: | <ul style="list-style-type: none"> • Topic: Introduction to Personalized Nutrition • Summary: This week we will get oriented to the course and the concept of personalized nutrition. We will discuss the syllabus and expectations. You will take a pre-test (not graded) that will help us evaluate your current knowledge of personalized nutrition and tailor the course to your interests. • Required Readings/Works: video watch (Too good to be true - Battling Bad Science, 14 min): https://www.youtube.com/watch?v=h4MhbkWJzKk • Assignment: Pre-test (homework, due Tuesday, not graded but worth 1 extra credit point if completed on time) |
| Week 2: | <ul style="list-style-type: none"> • Topic: The Meaning of the Mean (i.e., inter-individual variability in nutrition research) • Summary: As you read nutrition research literature, you will often encounter results reported as means (averages). Because nutrition studies are often observational epidemiological studies, it's important to understand how statistics work on the population level. This week we will critically evaluate the meaning of these results, how to interpret them, and whether we can make assumptions about individuals based on aggregate data. What are the implications of using "averages" in the context of individual patient or client care? • Required Readings/Works: Rose T. The Invention of the Average. In: <i>The End of Average</i>. New York: HarperOne. 2016;19-38. • Assignment: Complete pre-test by Tuesday (for 1 extra credit point) |
| Week 3: | <ul style="list-style-type: none"> • Topic: How we differ in response to foods, and how we don't • Summary: There are a wide variety of diets reported in the popular press, some of which claim to be based on your genetics. This week, we will |

| Week | Topics, Homework, and Assignments |
|----------------------|---|
| | <p>discuss the difficulties in communicating nuanced dietary information to a lay audience, and cases where diet must be individualized (i.e., PKU). We will also discuss how populations need to be studied to identify individual factors important to selecting diet.</p> <ul style="list-style-type: none"> • Required Readings/Works: Chapter 3 - Eat Right for Your Type Complete (no page numbers for online version); Phenylketonuria NIH rare diseases website - https://rarediseases.info.nih.gov/diseases/7383/phenylketonuria [about the disease pages on disease at a glance, symptoms, causes, next steps]; University of Washington What is the diet for PKU webpage - https://depts.washington.edu/pku/about/diet.html • Assignment: Quiz 1: Tuesday |
| Week 4: | <ul style="list-style-type: none"> • Topic: Why do we target everyone with interventions? • Summary: What is public health nutrition? What does it mean to say that “good public health is invisible”? What examples of successful public health interventions can be found in a grocery store, and what do these interventions mean for individual diet choices? • Required Readings/Works: History of US Iodine Fortification and Supplementation <i>Nutrients</i> pg 1740-1746 doi 10.3390/nu4111740; The Contribution of Public Health and Improved Social Conditions to Increased Life Expectancy: An analysis of public awareness <i>Journal of Community Medicine and Health Education</i> doi: 10.4172/2161-0711.1000311 (5 pages) • Assignment: Quiz 2: Tuesday; Field Trip on Thursday |
| Week 5: | <ul style="list-style-type: none"> • Topic: Metabolites and Metabolic Memory (i.e., how we differ in genetic and epigenetic makeup) • Summary: What is metabolite? What is metabolic memory? How does metabolic memory affect an individual’s metabolic health? • Required Readings/Works: NCBI Bookshelf – <i>Metabolism</i> (pp. 1-5); Video watch (Epigenetics– 13 min) https://www.youtube.com/watch?v=avWwfuYnnl&t=33s • Assignment: Quiz 3: Tuesday; Supermarket Field Trip Reflection Due Thursday |
| Week 6: | <ul style="list-style-type: none"> • Topic: Spotlight on Carbs in Metabolic Memories • Summary: Are all carbs the same? How does lifestyle impact carb status? How do carbs influence an individual’s metabolic memory and health? • Required Readings/Works: NCBI Bookshelf – <i>carbohydrates</i> (pp. 1-5) • Assignment: Quiz 4: Tuesday |
| Week 7: Dr. Cheng | <ul style="list-style-type: none"> • Topic: Spotlight on Fat in Metabolic Memories • Summary: Are all fats the same? How does lifestyle impact fat status? How do fats influence an individual’s metabolic memory and health? • Required Readings/Works: NCBI Bookshelf – <i>Lipids</i> (pp. 1-7) • Assignment: Quiz 5: Tuesday |
| Week 8: | <ul style="list-style-type: none"> • Topic: Spotlight on the Microbiome |

| Week | Topics, Homework, and Assignments |
|----------|---|
| | <ul style="list-style-type: none"> • Summary: What do our gut microbes eat? How do we acquire them? What epidemiological study designs are needed to understand our gut microbes? • Required Readings/Works: Diet and the human gut microbiome: an international review, <i>Digestive Diseases and Sciences</i> pgs. 723-740, doi: https://doi.org/10.1007/s10620-020-06112-w • Assignment: Quiz 6: Tuesday |
| Week 9: | <ul style="list-style-type: none"> • Topic: Spotlight on Proteins in Metabolic Memories • Summary: Are all proteins the same? How does lifestyle impact protein status? How do proteins or AAs influence an individual's metabolic memory and health? • Required Readings/Works: NCBI Bookshelf – <i>Proteins</i> (pp. 1-13) • Assignment: Quiz 7: Tuesday |
| Week 10: | <ul style="list-style-type: none"> • Topic: Debate • Summary: There are ongoing controversies over personalized nutrition. Depending on class size we will debate one or more of these topics: 1) Should nutrition interventions be applied to everyone (as part of public health initiatives)? 2) Is food medicine? 3) What qualifies as personalized nutrition (i.e. does a diet plan developed by a dietitian today count?) 4) Is breastmilk personalized nutrition? • Required Readings/Works: None for this week • Assignment: In-Class Debate: Thursday |
| Week 11: | <ul style="list-style-type: none"> • Topic: Spotlight on Vitamins in Metabolic Memories • Summary: What is a vitamin? How does lifestyle impact vitamins status? How do vitamins influence an individual's metabolic memory and health? • Required Readings/Works: NCBI Bookshelf – <i>Protein Enzymes</i> (pp. 1-5) • Assignment: Quiz 8: Tuesday; Position Paper Due Thursday |
| Week 12: | <ul style="list-style-type: none"> • Topic: Spotlight on Minerals in Metabolic Memories • Summary: What is a mineral? How does lifestyle impact minerals status? How do minerals influence an individual's metabolic memory and health? • Required Readings/Works: NCBI Bookshelf – <i>Minerals</i> (pp. 12-34); National Library of Medicine Definitions of Health Terms – Minerals (pp. 1-4) • Assignment: Quiz 9: Tuesday |
| Week 13: | <ul style="list-style-type: none"> • Topic: Food Frequency Analysis and Study Designs • Summary: How do we measure diet in humans? What are the basic types of human studies, and what are their strengths and limitations? How do limitations of tools influence epidemiological studies? • Required Readings/Works: Study design and hypothesis testing: issues in the evaluation of evidence from research in nutritional epidemiology <i>The American Journal of Clinical Nutrition</i> pgs. 1315S-1321S doi: https://doi.org/10.1093/ajcn/69.6.1315S • Supplementary/Bonus Readings: NutriTools website, Strengths and Weakness of Dietary Assessment Tools (DATs) - |

| Week | Topics, Homework, and Assignments |
|----------|--|
| | https://www.nutritools.org/strengths-and-weaknesses (please note, clicking on the tool name on the website will provide more detail on each tool) <ul style="list-style-type: none"> • Assignment: FFQ Analysis Worksheet Due Thursday |
| Week 14: | <ul style="list-style-type: none"> • Topic: Artificial Intelligence and the Future of Personalized Nutrition: The Opportunities and Challenges • Summary: What is AI? How can AI help with nutrition? What are the ethical challenges of using AI for personalized nutrition? Reflecting upon this course, what are the next steps? Where do you see the future of personalized nutrition? What are the opportunities, and what are the challenges? • Required Readings/Works: Artificial intelligence in nutrition research: perspectives on current and future research <i>Applied Physiology, Nutrition, and Metabolism</i> pgs. 1-8 doi https://doi.org/10.1139/apnm-2021-0448 • Assignment: Quiz 10: Tuesday; Dietary Recommendations Due Thursday |

IV. Student Learning Outcomes (SLOs)

At the end of this course, students will be expected to have achieved the Quest and General Education learning outcomes as follows:

Content: *Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline(s).*

- Identify and describe fundamental principles of nutritional genetics. (Aligns with Gen Ed and Quest II *Content* SLOs,)
 - Assignments:
 - Weekly Quizzes
 - In-class Debate
- Identify examples of how genetic variations among individuals may contribute to differences in nutritional needs. (Aligns with Gen Ed and Quest II *Content* SLOs.)
 - Assignments:
 - Weekly Quizzes
 - In-class Debate
 - Mock Meal Plan
- Explain the study designs used to study nutrition. (Aligns with Gen Ed and Quest II *Content* SLOs.)
 - Assignments:
 - Food Frequency Questionnaire
 - Position Paper

Critical Thinking: *Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the discipline(s).*

- Analyze a food frequency questionnaire. (Aligns with Gen Ed and Quest II *Critical Thinking* SLOs.)
 - Assignment:
 - Food Frequency Questionnaire (FFQ) Analysis
- Contrast public health nutrition with personalized nutrition. (Aligns with Gen Ed and Quest II *Critical Thinking* SLOs.)
 - Assignments:
 - Supermarket Field Trip Reflection
 - Position Paper

Communication: *Students communicate knowledge, ideas and reasoning clearly and effectively in written and oral forms appropriate to the discipline(s).*

- Articulate the challenges in implementing a personalized nutrition paradigm. (Aligns with Gen Ed and Quest II *Communication* SLOs.)
 - Assignment:
 - Supermarket Field Trip Reflection
 - Mock Meal Plan
- Debate topics relevant to personalized nutrition, and justify a position scientifically. (Aligns with Gen Ed and Quest II *Communication* SLOs.)
 - Assignments:
 - In-class Debate
 - Position Paper
 - Mock Meal Plan

Connection: *Students connect course content with meaningful critical reflection on their intellectual, personal, and professional development at UF and beyond.*

- Apply nutrition principles to practical everyday activities, such as grocery shopping and meal preparation. (Aligns with Quest II *Connection* SLO.)
 - Assignments:
 - Supermarket Field Trip Reflection
 - Mock Meal Plan

V. Quest Learning Experiences

1. Details of Experiential Learning Component

Supermarket Field Trip: There will be two components to this activity. During the class prior to the trip, we will present a lecture on what a public health nutrition intervention is, and what makes for a successful public health nutrition. It will include discussion about how good public health interventions are invisible. This will prepare students for the field trip. Because supermarkets contain a number of highly successful public health interventions, the class will then take a trip to a supermarket where we will walk through the aisles and highlight a number of successful public health interventions. This will

make the invisible visible and give students a chance to see the number of public health nutrition interventions they encounter on a daily basis, likely without knowing it.

Food Frequency Questionnaire Analysis: Personalized Nutrition relies on being able to accurately measure diet in a research setting. Completing a food frequency questionnaire will give students direct experience of what tools researchers use to measure diet, and the time research participants spend completing questionnaires for nutrition studies. As food frequency questionnaires can cause problems for individuals struggling with eating disorders, an alternative assignment that does not require the completion of a food frequency questionnaire is available to any student who asks, without need for any explanation of why the alternative assignment was requested. Students who can complete a food frequency questionnaire are encouraged to do so, for the insight into the nature of nutrition research that the questionnaire provides.

2. Details of Self-Reflection Component

Supermarket Field Trip Reflection: Following the Supermarket Field Trip, students will write a 1 page reflection paper in which they summarize what they learned from the supermarket field trip, and how they can apply what they learned to their daily lives. They will reflect on how they can make more informed, conscious food choices, and how public health initiatives influence the availability and location of foods on grocery store shelves.

Position Paper: Following the in-class debate, students will compose a position paper in which they articulate the opinion they have formed after participating in the debate. They will reflect on how their thinking has evolved, describe their final stance, and justify their position scientifically.

VI. Required Policies

Attendance Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

UF Evaluations Process

Student assessment of instruction is an important part of efforts to improve teaching and learning. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online.

Students can complete evaluations in three ways:

1. The email they receive from GatorEvals,
2. Their Canvas course menu under GatorEvals, or
3. The central portal at <https://my-ufl.bluera.com>

Guidance on how to provide constructive feedback is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

University Honesty Policy

UF students are bound by The Honor Pledge which states “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Conduct Code specifies a number of behaviors that are in violation of this code and the possible sanctions. See the [UF Conduct Code website for more information](#). If you have any questions or concerns, please consult with the instructor or TAs in this class.

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: (New Link: <https://policy.ufl.edu/regulation/4-040/>)

In-Class Recordings

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation,

assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Use of artificial intelligence (AI) tools

Note that the accuracy and credibility of information from AI-based platforms (e.g., ChatGPT) have been questioned. If students use AI tools to prepare their assignments, it is the students’ responsibility to ensure the information credibility, acknowledge the AI assistance and sources, and abide by the UF Honor Code. AI tools are not allowed for closed-book quizzes or exams.

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university’s counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

Whole Gator App and website connects UF students with resources dedicated to supporting overall health and well-being. In addition to many of the resources below it also has strategies to practice self-care. <https://one.uf.edu/whole-gator/topics>

Health and Wellness

- U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or [visit the Student Health Care Center website](#).
- University Police Department: [Visit UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).

- UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; [Visit the UF Health Emergency Room and Trauma Center website](#).
- GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell website](#) or call 352-273-4450.
- [Hitchcock Field and Fork Pantry](#). Food and toiletries for those experiencing food insecurity.
- Student Success Initiative, <http://studentsuccess.ufl.edu>.

Academic Resources

- E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- [Career Connections Center](#): Reitz Union Suite 1300, 352-392- 1601. Career assistance and counseling services.
- [Library Support](#): Various ways to receive assistance with respect to using the libraries or finding resources. Call 866-281-6309 or email ask@ufl.libanswers.com for more information.
- [Teaching Center](#): 1317 Turlington Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- [Writing Studio](#): Daytime (9:30am-3:30pm): 2215 Turlington Hall, 352-846-1138 | Evening (5:00pm-7:00pm): 1545 W University Avenue (Library West, Rm. 339). Help brainstorming, formatting, and writing papers.
- Academic Complaints: Office of the Ombuds; [Visit the Complaint Portal webpage for more information](#).
- Enrollment Management Complaints (Registrar, Financial Aid, Admissions): [View the Student Complaint Procedure webpage for more information](#).
- [Dean of Students Office](#). 202 Peabody Hall, 392-1261. Among other services, the DSO assists students who are experiencing situations that compromises their ability to attend classes. This includes family emergencies and medical issues.

Student Complaints:

- Residential Course: <https://www.ombuds.ufl.edu/complaint-portal/>
- Online Course: <https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint>

Cover Sheet: Request 21474

B.S. in Microbiology and Cell Science/Pharm.D. Combination Degree Program CALS

Info

| | |
|------------------------|--|
| Process | Degree New Combination Ugrad/Pro |
| Status | Pending at CALS - College of Agricultural and Life Sciences |
| Submitter | Monika Oli moli@ufl.edu |
| Created | 4/4/2025 12:03:00 PM |
| Updated | 4/22/2025 2:06:37 PM |
| Description of request | An agreement between Microbiology and Cell Science (MCS) and the UF College of Pharmacy (COP) allows MCB and MCB-UFO (CALS), and MCY (CLAS) students in their senior year as a microbiology and cell science majors to count first-year PharmD courses as additional life science elective courses upon PharmD program acceptance. |

Actions

| Step | Status | Group | User | Comment | Updated |
|---|----------|--|---------------|---------|-----------|
| Department | Approved | CALS - Microbiology and Cell Science 60100000 | Eric Triplett | | 4/22/2025 |
| Letter of Agreement UFCOP Microbiology MOU 2025.pdf | | | | | 4/4/2025 |
| PharmD catalog copy.docx | | | | | 4/4/2025 |
| College | Pending | CALS - College of Agricultural and Life Sciences | | | 4/22/2025 |
| No document changes | | | | | |
| Director of Institutional Assessment | | | | | |
| No document changes | | | | | |
| AP for Undergraduate Affairs | | | | | |
| No document changes | | | | | |
| AP for Academic and Faculty Affairs | | | | | |
| No document changes | | | | | |
| University Curriculum Committee | | | | | |
| No document changes | | | | | |
| Provost | | | | | |
| No document changes | | | | | |
| Office of the Registrar | | | | | |
| No document changes | | | | | |
| OIPR Notified | | | | | |
| No document changes | | | | | |
| Catalog | | | | | |
| No document changes | | | | | |
| Student Academic Support System Notified | | | | | |
| No document changes | | | | | |

| Step | Status | Group | User | Comment | Updated |
|---------------------|--------|-------|------|---------|---------|
| College Notified | | | | | |
| No document changes | | | | | |

Degree|New|CombinationDegree-UgradPro for request 21474

Info

Request: B.S. in Microbiology and Cell Science/Pharm.D. Combination Degree Program CALS

Description of request: An agreement between Microbiology and Cell Science (MCS) and the UF College of Pharmacy (COP) allows MCB and MCB-UFO (CALS), and MCY (CLAS) students in their senior year as a microbiology and cell science majors to count first-year PharmD courses as additional life science elective courses upon PharmD program acceptance.

Submitter: Monika Oli moli@ufl.edu

Created: 4/4/2025 12:17:15 PM

Form version: 2

Responses

Department Name (Undergraduate Degree Program) Microbiology and Cell Science

College Name (Undergraduate Degree Program) CALS

Major Name (Undergraduate Degree Program) Bachelor

Major Code (Undergraduate Degree Program) MCB

Department Name (Professional Degree Program) PharmD

College Name (Professional Degree Program) Pharmacy

Major Name (Professional Degree Program) PharmD

Major Code (Professional Degree Program) PHA

Effective Term Earliest Available

Effective Year Earliest Available

What is the rationale for proposing this Combination Degree? The B.S. in Microbiology and Cell Science/Pharm.D. combination degree program, also referred to as the 3 + 4 program, allows students to earn their B.S in Microbiology and Cell Science and Pharm.D. degree in 7 years by reducing the undergraduate track by 1 year. This program can be completed by students majoring in Microbiology and Cell Science within the College of Agricultural and Life Sciences or The College of Liberal Arts and Sciences.

What are the benefits of establishing this program? The program allows students to earn their B.S in Microbiology and Cell Science and Pharm.D. degree in 7 years by reducing the undergraduate track by 1 year. Financial benefit is that Bright Future will pay for the undergraduate portion of the first year pharmacy classes and therefor make the cost of professional school more affordable for the students.

Double-counted credits and Degree Requirements Students will have to complete all degree requirements by the end of their third year. If admitted to Pharmacy school, their 4th year, which will equal first year Pharmacy school, and remaining credits to complete their 120 CR will come from these pharmacy courses.

Many of our students come in with a lot of credits and often graduate early, so the number of credits used by PHA classes to complete their degree may vary greatly from student to student.

Students must meet the university and college general education requirements and have 120 credit hours minimum. Any remaining credit for the B.S. in Microbiology, can be earned through additional undergraduate or pharmacy courses.

Coherent Course of Study As outlined in the other attached documents, the combination program presents a clear and logical sequence of courses that provide students with a comprehensive understanding of microbiology and other prerequisites before starting pharmacy school. The original MCS degree is not compromised as all degree requirements have to be fulfilled. The combined program will not prolong the student's time to graduation as they will obtain their BS degree after their 8th semester.

Meeting Degree Requirements As outlined in the proposed 8-semester plan attached, students have to meet all B.S. requirements before taking any pharmacy courses in their 4th year. This will mean for many students that they have to take more summer classes to complete degree requirements. Our advisors will ensure completion of all undergraduate requirements. The Pharmacy school mentors and advisors will take care of the students starting in their 4th year of undergraduate studies, which is equivalent to their first year of Pharmacy school. Their curriculum is well established and it's one of the best programs in the country.

Student Qualifications Students will follow a stringent admissions process

<https://admissions.pharmacy.ufl.edu/steps-to-apply/application-requirements/>. This includes application through the PharmCAS portal that requires additional essays. Students must have

completed all curricular prerequisites. Letters of recommendation are required. Extracurricular activities are also taken into consideration.

Eligibility Requirements The eligibility requirements are dictated by the admissions criteria of the College of Pharmacy <https://admissions.pharmacy.ufl.edu/steps-to-apply/application-requirements/>
Science GPA: This is determined by calculating the GPA from all science courses. The preferred minimum science GPA to apply is 2.5.

Degree Requirement: Earning an Associate of Arts or Science (A.A./A.S.) degree, which includes the required pre-professional coursework, is the minimum requirement and a fantastic stepping stone to your future. This degree not only provides you with essential skills and knowledge but also enhances your qualifications for further studies and career opportunities. If your university doesn't offer an A.A. or A.S. degree, you'll need to complete the necessary pre-professional coursework along with 36 credit hours of state-required general education credits. Choosing the A.A./A.S. path can set you up for greater success—consider making it your goal!

PharmCAS Essay and Supplemental Questions: These communicate motivation, goals, circumstances and experiences related to a pharmacy career.

Letters of Recommendation

Two letters are required from separate references. The committee prefers letters from a pharmacist and a science professor.

Extracurricular Activities: Examples include involvement in student organizations, community service, volunteering and work experience. Leadership and pharmacy experiences are also valued.

Is this combination degree double-counting 12 or fewer credits? Yes

Double-counted Credit Justification Many of our students come to UF with a lot of credits and often graduate early, so the number of credits used by PHA classes to complete their degree may vary greatly from student to student.

Students must meet the university and college general education requirements and have 120 credit hours minimum. Any remaining credit for the B.S. in Microbiology, can be earned through additional undergraduate or pharmacy courses.

The first year pharmacy program consists of 33 CR. Students will be able to use up to 12 CR to fulfill their 120 CR degree requirement.

Impacts on Other Programs There is no impact on other programs. A similar programs as the one proposed in this submission already exists for Biology Majors. They can opt for a 3+4 BS in Biology/PharmD program <https://admissions.pharmacy.ufl.edu/b-s-in-biology-pharm-d-combination-degree-program/>



February 26, 2025

To Whom It May Concern:

The College of Pharmacy supports the creation of a new combination (undergraduate/professional) degree program between the Microbiology and Cell Science (MCS) department and the Doctor of Pharmacy (PharmD).

Sincerely,

A handwritten signature in black ink that reads "Karen Whalen". The signature is written in a cursive, flowing style.

Karen Whalen, PharmD, BCPS, FAPhA
Associate Dean for Professional Advancement & Assessment
Clinical Professor | Department of Pharmacy Practice and Education
University of Florida College of Pharmacy

A handwritten signature in black ink that reads "Ivonne Ponicsan". The signature is written in a cursive, flowing style.

Ivonne Ponicsan, M.A.
Associate Director of Admissions
Pre-Pharmacy Society Faculty Advisor
University of Florida College of Pharmacy

B.S. in Microbiology and Cell Science /Pharm.D. Combination Degree Program

3+4 Program

B.S. in Microbiology and Cell Science/Pharm.D.

The UF College of Pharmacy offers UF Microbiology and Cell Science students enrolled in the College of Agricultural and Life Sciences or the College of Liberal Arts and Sciences a pathway toward a combination B.S. in Microbiology and Cell Science and Pharm.D. degree.

Overlapping credits: 33

Qualified Microbiology and Cell Science students can pursue a combined B.S/PharmD program

Students complete 33 credits of first year PharmD courses in their 4th year of undergraduate degree.

Admission Criteria: >2.5 science GPA; completion of the following with a C or better:

Anatomy and Physiology, Calculus, Statistics

Contact: TBD

PROGRAM OVERVIEW:

The B.S. in **PROGRAM OVERVIEW:**

The B.S. in Microbiology and Cell Science /Pharm.D. combination degree program, also referred to as the 3 + 4 program, allows students to earn their B.S in Microbiology and Cell Science and Pharm.D. degree in 7 years by reducing the undergraduate track by 1 year. This program can be completed by students majoring in Microbiology and Cell Science within the College of Agricultural and Life Sciences or The College of Liberal Arts and Sciences.

Students on the 3 + 4 tracks are not guaranteed a seat in our Pharm.D. program and must still apply and be admitted. Students can only earn their B.S. in Microbiology and Cell Science if admitted to the UF Pharm.D. program and after successfully completing year 1 of the Pharm.D. program. Students in the 3 + 4 program cannot earn their B.S. from UF after completing their first year at another Pharmacy School.

For more information please email prepharmacy@cop.ufl.edu, with the subject line: "3 + 4 program."

Recommended Semester Plan for MCS Pre-Pharm Students

Note: many of our students come in with a lot of credits and often graduate early, so the number of credits used by PHA classes to complete their degree may vary greatly from student to student. Students must meet the university and college general education requirements and have 120 credit hours minimum. Any remaining credit for the B.S. in Microbiology, can be earned through additional undergraduate or pharmacy courses.

Although this suggested semester plan seems challenging, most of our students come with gen ed credits and many have bio, chemistry or other credits that will ease their load.

Microbiology Major (CALS)

Fall (Semester 1; Yr 1)

| Course | Credits |
|---|-----------|
| CHM2045 and 2045L General Chemistry 1 (3) and Laboratory (1) (GE-P) | 4 |
| MAC 2311 Analytic Geometry and Calculus 1 (GE-M) | 4 |
| Quest 1 (GE-H) | 3 |
| State Core Composition (GE-C, WR 6000) | 3 |
| TOTAL | 14 |

Spring (Semester 2; Yr 1)

| Course | Credits |
|---|--------------|
| CHM 2046 and 2046L General Chemistry 2 (3) and Laboratory (1) | 4 |
| BSC 2010 and BSC 2010L Integrated Principles of Biology 1 (3) and Laboratory (1) (GE-B) | 4 |
| Economics: ECO 2013 or ECO 2023 or AEB 2014 (CALS GE-S) | 3/4 |
| Quest 2 (GE-B/P) | 3 |
| TOTAL | 14/15 |

Summer (Semester optional; Yr 1)

| Course | Credits |
|-------------------------------------|----------|
| State Core GE-S | 3 |
| STA2023 (GE-M) | 3 |
| AEC 3030C / SPC2608 Adv. Comm. Oral | 3 |
| TOTAL | 9 |

Fall (Semester 3; Yr 2)

| Course | Credits |
|---|----------------|
| BSC 2011 and 2011L Integrated Principles of Biology 2 (3) and Laboratory (1) (GE-B) | 4 |
| CHM 2210 Organic Chemistry 1 (3) and Laboratory (1)* | 4 |
| State Core GE-S | 3 |
| State Core Composition (GE-C, WR 6000) | 3 |
| International Course that satisfies (GE-H or GE-S, WR 6000) | 3 |
| TOTAL | 17 |

Spring (Semester 4; Yr 2)

| Course | Credits |
|---|----------------|
| CHM 2211 and 2211L Organic Chemistry 2 (3) and Laboratory (2)** | 5 |
| Dept core Genetics (PCB4522) | 3 |
| Composition (GE-C, WR 6000) | 3 |
| Dept. Core: Python Programming for Biology (Or similar quantitative elective) | 3 |
| Dept Core: Principles of Microbiology and Principles of Microbiology Laboratory | 3 |
| TOTAL | 17 |

Summer (Semester optional; Yr 2)

| Course | Credits |
|---|----------------|
| BCH4024 | 4 |
| Dept. Electives: Prokaryotic Diversity, other | 3 |
| AEC3033C/ENC2210/ENC3254 (Adv. Comm. Writing) | 3 |
| TOTAL | 10 |

Fall (Semester 5; Yr 3)

| Course | Credits |
|--|----------------|
| PHY2053 and PHY2053L Physics 1 (4) and Laboratory (1) | 5 |
| APK2100C | 3 |
| Dept Core: Prokaryotic Cell Structure and Function or Eukaryotic Cell Structure and Function | 3 |
| State Core Composition (GE-C, WR 6000) | 3 |
| Dept. Electives: Parasitology, Virology, AMR.... | 3 |
| TOTAL | 17 |

*If students take CHM2210 lab (1 credit) they only need to take 1 credit of CHM2211 lab. This applies to students that might take these courses transiently. UF only offers CHM2211 lab (2 credits).

**UF offers only 2-credits CHM2211 lab. So, students do not need to take CHM2210 lab.

Spring (Semester 6; Yr 3)

| Course | Credits |
|---|--------------|
| PHY2054 and PHY2054L Physics 2 (3) and Laboratory (2) | 5 |
| Dept Core: MCB4304L Adv. Micro. lab | 1 |
| Dept Core: Bacterial Pathogens or Immunology | 3 |
| Gen. Ed course | 3 |
| APK2105C | 3-4 |
| TOTAL | 15-16 |

Summer (Semester optional; Yr 3)

| Course | Credits |
|-----------------|-----------|
| Civics course | 4 |
| Dept. Electives | 3 |
| Gen. Ed. | 3 |
| TOTAL | 10 |

Fall (Semester 7; Yr 4; 1st year in Pharm D)

| Course | Credits |
|---|-------------|
| PHA5103 Principles of Patient Centered Care | 2 |
| PHA5007 Pharmacy and Population Health | 2 |
| PHA5727 Principles of Systems-Based Practice | 1 |
| PHA5560 Pathophysiology and Patient Assessment I | 3 |
| PHA 5439 Principles of Medicinal Chemistry and Pharmacology I | 3 |
| PHA5176 Drug Delivery Systems | 4 |
| PHA5021C Personal and Professional Development I | 0.5 |
| PHA5161L Professional Practice Skills I | 1 |
| TOTAL | 16.5 |

Spring (Semester 8; Yr 4; 1st year in Pharm D)

| Course | Credits |
|---|-------------|
| PHA5561 Pathophysiology and Patient Assessment II | 3 |
| PHA5515 Principles of Medicinal Chemistry and Pharmacology II | 1 |
| PHA5132 Principles of Drug Therapy Individualization I | 4 |
| PHA5781 Patient Care I | 3 |
| PHA5244 Principles of Evidence-Based Practice | 3 |
| PHA5703 Principles of Law & Ethics | 1 |
| PHA5022 Personal and Professional Development II | 0.5 |
| PHA5162 Professional Practice Skills II | 1 |
| TOTAL | 16.5 |

Microbiology Major (CLAS)

Fall (Semester 1; Yr 1)

| Course | Credits |
|--|-----------|
| CHM 2045 and 2045L General Chemistry 1 (3) and Laboratory (1) (GE-P) | 4 |
| MAC 2311 Analytic Geometry and Calculus 1 (GE-M) | 4 |
| Quest 1 (GE-H) | 3 |
| State Core Composition (GE-C, WR 6000) | 3 |
| TOTAL | 14 |

Spring (Semester 2; Yr 1)

| Course | Credits |
|---|--------------|
| CHM 2046 and 2046L General Chemistry 2 (3) and Laboratory (1) | 4 |
| BSC 2010 and BSC 2010L Integrated Principles of Biology 1 (3) and Laboratory (1) (GE-B) | 4 |
| Civic course | 3/4 |
| Quest 2 (GE-B/P) | 3 |
| TOTAL | 14/15 |

Summer (Semester optional; Yr 1)

| Course | Credits |
|---------------------|----------|
| State Core GE-S | 3 |
| STA2023 (GE-M) | 3 |
| AEC 3030C / SPC2608 | 3 |
| TOTAL | 9 |

Fall (Semester 3; Yr 2)

| Course | Credits |
|---|---------|
| BSC 2011 and 2011L Integrated Principles of Biology 2 (3) and Laboratory (1) (GE-B) | 4 |
| CHM 2210 Organic Chemistry 1 (3) and Laboratory (1) | 4 |
| State Core GE-S | 3 |
| State Core Composition (GE-C, WR 6000) | 3 |

| | |
|---|-----------|
| International Course that satisfies (GE-H or GE-S, WR 6000) | 3 |
| TOTAL | 17 |

Spring (Semester 4; Yr 2)

| Course | Credits |
|---|-----------|
| CHM 2211 and 2211L Organic Chemistry 2 (3) and Laboratory (2) | 5 |
| Genetics (PCB4522) | 3 |
| Composition (GE-C, WR 6000) | 3 |
| Dept. Core: Python Programming for Biology (Or similar quantitative elective) | 3 |
| Dept Core: Principles of Microbiology and Principles of Microbiology Laboratory | 3 |
| TOTAL | 17 |

Summer (Semester optional; Yr 2)

| Course | Credits |
|---|-----------|
| BCH4024 | 4 |
| Dept. Electives: Prokaryotic Diversity, other | 3 |
| Foreign language -1 | 3 |
| TOTAL | 10 |

Fall (Semester 5; Yr 3)

| Course | Credits |
|---|-----------|
| PHY 2053 and PHY 2053L Physics 1 (4) and Laboratory (1) | 5 |
| APK2100C | 3 |
| Cell structure | 3 |
| State Core Composition (GE-C, WR 6000) | 3 |
| Dept. Elective: Parasitology, Virology, AMR..... | 3 |
| TOTAL | 17 |

Spring (Semester 6; Yr 3)

| Course | Credits |
|---|-----------|
| PHY2054 and PHY2054L Physics 2 (3) and Laboratory (2) | 5 |
| Dept Core: MCB4304L Adv. Micro. lab | 1 |
| Dept Core: Bacterial Pathogens or /Immunology | 3 |
| Gen. Ed. | 3 |
| APK2105C | 3 |
| TOTAL | 17 |

Summer (Semester optional; Yr 3)

| Course | Credits |
|--------|---------|
|--------|---------|

| | |
|---------------------|-----------|
| BCH4024 | 4 |
| Dept. Electives | 3 |
| Foreign language -2 | 3 |
| TOTAL | 10 |

Fall (Semester 7; Yr 4; 1st year in Pharm D)

| Course | Credits |
|---|----------------|
| PHA5103 Principles of Patient Centered Care | 2 |
| PHA5007 Pharmacy and Population Health | 2 |
| PHA5727 Principles of Systems-Based Practice | 1 |
| PHA5560 Pathophysiology and Patient Assessment I | 3 |
| PHA 5439 Principles of Medicinal Chemistry and Pharmacology I | 3 |
| PHA5176 Drug Delivery Systems | 4 |
| PHA5021C Personal and Professional Development I | 0.5 |
| PHA5161L Professional Practice Skills I | 1 |
| TOTAL | 16.5 |

Spring (Semester 8; Yr 4; 1st year in Pharm D)

| Course | Credits |
|---|----------------|
| PHA5561 Pathophysiology and Patient Assessment II | 3 |
| PHA5515 Principles of Medicinal Chemistry and Pharmacology II | 1 |
| PHA5132 Principles of Drug Therapy Individualization I | 4 |
| PHA5781 Patient Care I | 3 |
| PHA5244 Principles of Evidence-Based Practice | 3 |
| PHA5703 Principles of Law & Ethics | 1 |
| PHA5022 Personal and Professional Development II | 0.5 |
| PHA5162 Professional Practice Skills II | 1 |
| TOTAL | 16.5 |

Students must meet the university and college general education requirements and have 120 credit hours minimum. Any remaining credits if students cannot use the summer semesters, for the 120 minimum for the B.S. in Microbiology, can be earned through additional undergraduate or pharmacy courses.

*Required for Pharm-D (professional course requirements)

[Pharm.D. Curriculum » PharmD Curriculum » College of Pharmacy » University of Florida \(ufl.edu\)](#)

List of Additional Life Science electives that are satisfied by first and second semester courses (first year in Pharm-D) in the Doctor of Pharmacy curriculum and the Microbiology curriculum. These courses can replace “other electives” but not departmental electives.

PHA5560 Pathophysiology & Patient Assessment I (3 credits)

PHA5561 Pathophysiology and Patient Assessment II (3 credits)

PHA5132 Principles of Drug Therapy Individualization (4 credits)

PHA5439 Principles of Medicinal Chemistry and Pharmacology I (3 credits)

PHA5515 Principles of Medicinal Chemistry and Pharmacology II (1 credit)

CLAS-MCB students should take additional language courses (8-10 credits), one humanity and one additional social science course. They do not need to take Adv. Comm. Writing, oral, and economics courses like the CALS students.

The sequence includes all preprofessional requirements from the UF College of Pharmacy

