



UNC
GLOBAL

THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

COLLEGE OF ARTS & SCIENCES

STUDY ABROAD OFFICE

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**UNC STUDY ABROAD OFFICE
PROPOSAL COVER SHEET**

FACULTY INFORMATION:

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PROPOSED STUDY ABROAD PROGRAM INFORMATION:

Program Title	UNC Biology and Spanish Study Abroad
Program Location (City, Country)	San Jose, Costa Rica
Program Dates	Six weeks from May 26 to July 7, 2016

COURSE INFORMATION:

Course Name	Biology 202: Molecular Biology & Genetics
Credits	4
Credit Type	UNC graded

Course Name	SPAN 203: Intermediate Spanish I or SPAN 204: Intermediate Spanish II
Credits	3
Credit Type	TREQ



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August 17, 2015

Administrative Board of the College of Arts & Sciences
Office of General Education
CB # 3510
300 Steele Building
UNC-CH

Dear Colleagues:

UNC BIOLOGY/SPANISH COSTA RICA
UNC SCIENCE STUDY ABROAD IN COSTA RICA

The Study Abroad Office, in conjunction with the Departments of Biology and Romance Studies, writes to submit this proposal for a summer program in San Jose, Costa Rica. If approved, the program will start in the summer of 2016. This proposal was developed during this year by: Dr. Kelly A. Hogan (Senior Lecturer in Department of Biology), Dr. Brian Hogan (Lecturer in Department of Chemistry), and Mr. Rodney Vargas (UNC-Chapel Hill, Office of Study Abroad). As part of this process, Mr. Vargas conducted a site visit to Costa Rica this summer to make the initial logistical arrangements for this program and contact the relevant academic departments.

Partner Institution: University of Costa Rica

The University of Costa Rica (UCR) will be the main partner institution for this program, which is the university that our Office is already partnering with for several years for the Spanish for the Professions Minor Study Abroad Program. The UCR has a rich and accomplished history since it was established as University of Santo Tomas in 1843. Its vision aims to teach and find ways to benefit the Costa Rican peoples and the Central American Region through research and critical thinking. Its main guiding principles include academic freedom, respect for cultural and ethnic diversity, respect for people and for freedom of speech, academic excellence and a commitment to the environment.

UCR is a leading national and international institution in the Latin American region and is the top ranked university in Central America. This year, UCR was ranked again among the Top 500 universities in the world (#481 by Quacquarelli SL) and in Latin America (#21 by Quacquarelli SL). The University carries out joint activities with faculty members and researchers from many universities, agencies and international cooperation institutions around the world. The Office of International Affairs and External Cooperation (OAICE) and the Biology Department at UCR have fully endorsed and agreed to work with UNC-Chapel Hill in this study abroad program.

Additional information about the University of Costa Rica can be found at:
www.ucr.ac.cr

Rationale for the program

UNC-CH's 2016 reaccreditation from the Southern Association of Colleges and Schools (SACS) requires a Quality Enhancement Plan (QEP) as one of two major self-study documents. The QEP is a proposal for a 5-year implementation of a new initiative addressing a well-defined and focused topic that makes measureable improvement of student learning and is aligned with the University's mission and strategic priorities. One of the major aspects of our QEP at Carolina will be to increase the number of study abroad opportunities for students in the natural science division of the College. Not only do we want to increase the number of natural science students studying abroad, but we would like the students to reflect the diversity of the student body. Close to 20% of the students are first generation students. Close to 20% are underrepresented minority students. We will encourage all students to apply regardless of their financial status and work to see if funding can be found to ensure our enrollment reflects our student body. Addressing a long-term plan, the QEP also sets the goal of having more science students do independent research abroad.

It is a known fact that students who declare STEM majors are less likely to study abroad. However, the Study Abroad office has had great success with science study abroad opportunities that last no more than 6 weeks over a summer. These programs are faculty-led and offer a UNC-CH course in a foreign classroom. Students enrolled in the program additionally register for a language or a cultural class run by the peer institution in the foreign country. Chemistry and Biology have had several successful programs such as Organic Chemistry in Sevilla, Spain and Biochemistry in Grenoble, France. Since the implementation of the QEP begins in May of 2016, we hope to have additional programs ready for summer 2016.

Specifically, we are looking to increase the offering of Biology 202, Genetics and Molecular Biology, which has never been taught as a summer course abroad. This proposal is mainly to develop a second option for our Spanish-speaking students in Costa Rica. The proposed Costa Rica program would be with the Universidad de Costa Rica for summer 2016. This is a university that faculty in our Department of Romance Studies have been partnering with for several years already, so offering a science course will be relatively straight-forward from a student affairs standpoint.

Biology 202 is a great course to take to Costa Rica for several reasons. First, it is a required course for all biology and chemistry majors that is taken early in the curriculum. We hope we can catch many rising sophomores and juniors interested in the course. Second, the demand is enormous for this course. In fact, this fall we have 180 students on a waitlist for the course. Many students wanting the course are not even biology majors; this course serves as a pre-med requirement for many students. Thus, we will have no shortage of students needing and wanting this course. Third, a large number of our students hoping to enter a pre-health field have a desire to become more proficient in Spanish, and this program allows them a summer in a homestay with a host family, ensuring they are immersed in the language and culture. Lastly, any good study abroad program should incorporate the local community and culture into the course being taught. Costa Rica is an environment rich in biodiversity and the country has many successful efforts in conservation. We could capitalize on this aspect of Costa Rican culture by exploring population genetics and the effect of shrinking gene pools. A second focus could be on genetically modified crops. According to the TicoTimes on Oct 29, 2013, "A study by the University of Costa Rica and the National University found that 75 percent of Costa Ricans could not explain what a genetically modified organism (GMO) is or for what it is used." This is not unlike the knowledge of most Americans. A comparative approach between the USA and Costa Rica in terms of societal issues and rules controlling the growth and consumption would be interesting. The latter focus is timely and fitting for Carolina's new theme around food, "Feeding a Hungry World. Food Security in the 21st Century."

The proposed Science program in Costa Rica has been discussed with the Chairs of the Departments of Biology and of Romance Studies, Dr. Victoria L. Bautch and Dr. Federico Luisetti, respectively and they fully support the implementation of the proposed program. Both, Dr. Kelly Hogan and Dr. Brian Hogan have experience developing and teaching the Biology course, and taking UNC-CH students abroad as they taught a Study Abroad Chemistry Program in Grenoble in 2014. Dr. Kelly and Brian Hogan have research backgrounds and will begin forming relationships with faculty in Costa Rica that might be interested in having UNC-CH science students in the future in a semester long exchange. The Biology Department at the Universidad de Costa Rica is very interested in interacting with our faculty and students, and Dr. Kelly and Brian Hogan will help set a long-term plan in motion.

Program Structure and Content

Each summer, the UNC-CH faculty member will teach the Biology course while serving as resident director of the program. The Spanish language course will be taught by the UCR Foreign Languages Center.

During the mornings, the Biology Program will be run in parallel with the Psychology Program, with students mixing during the afternoon in the Spanish language classes according to their level.

The courses are approved and listed in the Undergraduate Bulletin: BIOL 202: Introduction Molecular Biology & Genetics, and, SPAN 203 Intermediate Spanish I or SPAN 204 Intermediate Spanish II. Description of the content, grading structure and overall course requirements are indicated in the syllabi attached as **Appendix I** to this proposal.

Following is a brief description of the courses to be offered:

BIOL 202: Introduction Molecular Biology & Genetics (Dr. Kelly Hogan and Dr. Brian Hogan as co-instructor in summer 2016).

Biology 202, a 4-graded credit UNC-CH course, is an introduction to genetics and molecular biology. Classes will be held every morning from M-TH (mirroring what we teach during the regular semester) using structured, active learning techniques. Recitations will be held on Fridays.

As part of the program, students will be working on group projects based around primary literature to consider societal issues in Costa Rica that can be solved with genetics. Students will have some freedom in choosing the questions they will answer. Example ideas could be as follows. Are there crops such as bananas and pineapples that can be enhanced by genetic modification and how do citizens feel about these types of enhancements? Are conservation efforts being hindered by genetic homogeneity in certain species and what are organizations in Costa Rica doing to overcome this? Students will also be asked to consider if/how their project conclusions are of importance to the U.S. Group projects will be a collaborative experience that also has students practicing important science communication skills.

SPAN 203: Intermediate Spanish I (taught by UCR Foreign Language Center)

This 3-TREQ credit course is directed at students with a basic knowledge of Spanish Language who would like to increase rapidly and efficiently their competence to communicate in Spanish, both in the linguistics and the cultural aspects in all four skills: oral and written expression, oral and written comprehension.

SPAN 204: Intermediate Spanish II (taught by UCR Foreign Language Center)

This 3-TREQ credit course is directed at those students that have taken more than two semesters of Spanish. This course is directed at students with an intermediate knowledge of Spanish Language who would like to increase rapidly and efficiently their competence to communicate in Spanish, both in the linguistics and the cultural aspects in all four skills: oral and written expression, oral and written comprehension.

Program Activities and Guest Lectures

As part of the academic activities during the Spanish Language course, the University of Costa Rica Language Center will provide lectures about the history, culture, and contemporary society in Costa Rica. These series of lectures will provide our students

some basic understanding of the social and historical context of their study site. Please see Schedule in **Appendix I**.

The program will take full advantage of its location in Costa Rica by inviting guest lecturers from UCR (TBD). Some ideas include the following but are not limited to:

- 1) A guest lecture on the public health care system in Costa Rica
- 2) A guest lecture on the national parks system in Costa Rica
- 3) A guest lecture on current issues with genetic modification of crops in Costa Rica
- 4) Interaction (including social) with UCR students (ideally those studying for Biology and/or Psychology), to include UNC students conducting one-on-one interviews with their counterparts regarding UCR students' academic curriculum, challenges, career goals and opportunities
- 5) Volunteering with local NGOs in coordination with the UCR Volunteer Programs Office

All activities and guest lectures will incur required student assignments, such as essays and class presentations, through which students will offer analysis and reflection on the information and experience gained.

Program Dates, Requirements, Availability, and Size

It is expected that this six-week program will be offered every summer starting in 2016. The minimum GPA will be 2.75. Students must have at least sophomore status. The maximum number of students who can be accepted in the program is 20. The prerequisite for the BIOL 202 is BIOL 101 and CHEM 101 or 102. The completion of two semesters of Spanish is also required. This program shall be made available to all UNC system students, with priority given to UNC-CH students.

Student Accommodation and Resources

As it does with our current Spanish for the Medical Professions Program, the UCR Office of International Affairs and External Cooperation (OAICE) will coordinate the logistics of the program and will serve as the link between the UNC-Chapel Hill program and the UCR community. At the UCR campus students will have access to several libraries, cafeterias, museums, eduroam Wi-Fi for internet services and ATMs. To complete their course assignments while abroad, students can do everything through the internet-- they will do online homework through textbook web portals and they can use UNC-CH libraries remotely by logging in with their onyen to gather primary literature.

Students have the opportunity to experience Spanish language and culture through daily interaction with Costa Rican families through home stays, a key component of the program. These homestays are located in the neighborhoods near the UCR campus in San Pedro. The host families will provide breakfast, dinner and laundry services. The Costa Rica Language Academy (CRLA), also located near the UCR campus in San Pedro and with significant experience in hosting international students, will be the institution

organizing the onsite orientation and doing the selection and arrangements for homestays. The CRLA also will serve as a resource through which students may book optional excursions not included in the official program. In the city of San Pedro, students will find plenty of options for shopping malls, restaurants, banks, clinics and entertainment. The capital city of San Jose is just minutes away by public bus and it offers not only additional options for shopping and dining but it is also home for the major cultural sites in Costa Rica: the Teatro Nacional and the Museo Nacional for the visual and performing arts.

Program Marketing

Several marketing strategies will be used to recruit students for this program, including the usual ones coordinated by the Study Abroad Office and the Biology Department. For example, the Biology lecturer advisor will send out an email to the biology majors (close to 2,000 students) and promote it in the Biology accounts in Facebook, Instagram, and Twitter, which reach many other students within and outside the major. Academic Advising will also be asked to promote this program on their social media accounts.

Safety and Security in Costa Rica

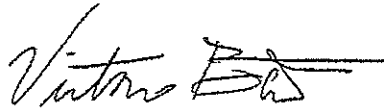
Costa Rica is a developing country with a strong democratic tradition. However, incidents of opportunistic crime are increasing specially around the tourist areas, and U.S. citizens are frequent victims. These dangers can be minimized by simple common sense, awareness and precautions such as keeping valuables out of sight, traveling in groups and avoiding certain areas after dark, not carrying a lot of cash and leaving the passport in a safe place. There are no major epidemics or health risks either in Costa Rica.

The US State Department offers additional specific information on Costa Rica at the following web site:

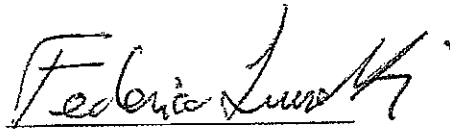
<http://travel.state.gov/content/passports/english/country/costa-rica.html>

We hope this proposal has given a clear representation of the summer study abroad program that we wish to offer in 2016 and every year thereafter. We are happy to provide any further information that you may need to evaluate this proposal.

Sincerely,



Victoria L. Bautch
Chair, Biology Department



Federico Luisetti
Chair, Romance Studies



Robert Miles,
Associate Dean for Study Abroad and International Exchanges

BIOL 202 Molecular Biology & Genetics

Dr. Kelly Hogan & Dr. Brian Hogan

Summer 2016, University of Costa Rica

Prerequisites

BIOL 101 and CHEM 101, with a grade of C or better

Your instructors

Dr. Kelly Hogan leek@email.unc.edu

Dr. Brian Hogan hoganb@email.unc.edu

Main Goals of the course

1. To provide you with the core principles of genetics and molecular biology
2. To gain higher level thinking skills
3. This course should excite you about basic science and its applications

Copyright Information:

All materials used in this course including notes, tests and assignments are covered by copyrights, which forbid you from sharing class materials with any group.

Expectations

The course is composed of four class meetings and one recitation session each week. **This is NOT a class for passive learners. You are expected to be actively engaged in this course through class discussions, class activities and pre- as well as post-lecture assignments and readings.**

It is expected that you will spend several hours reading/working problems associated with each class. If you stay on top of your reading and homework, there will be no need to cram for an exam. Practice, practice, and practice more. Use the internet or other textbooks in the library to find more problems if you run out from your textbook.

Textbook

Klug et al.: Essentials of Genetics 8th edition

The textbook is available in the bookstore in different formats. This text comes with a web-based software package called **MasteringGenetics** that will be the medium through which **you will be quizzed and receive short pre-lecture and post-lecture assignments.** The package also includes an interactive eBook. There are also other purchase options of the textbook (e.g. you can buy a used textbook and a stand-alone MasteringGenetics package).

Recitations

This course is a 4 credit hours course, and the recitations are not simply “going over the material that was learned in class”, but rather a **core component of the course**. Some of the material covered in recitations will be supplemental to the one discussed in class.

Class and Recitations Participation

Students are expected to attend and participate in class meetings and recitations. We'll have daily graded participation assignments, either with the use of technology or turned in on paper. These are required—thus your attendance in class is required.

Assignments

During the semester you will have **pre-class, in-class, and post-class assignments**.

- The pre-class assignments will be based on **assigned readings from the textbook**. The assignments will be given via the **MasteringGenetics** system (see above).
- In-class assignments will include graded participation activities and other activities.
- Post-class assignments will include **MasteringGenetics** and written **Homework Assignments** (see below).

All assignments due dates appear on the detailed schedule. Updates will be announced on Sakai. **You are responsible for submitting the assignments on time**. There will be no “second chances” in this case.

Participation

We'll have daily participation assignments, either with the use of technology or turned in on paper. These are required.

Homework Assignments

Problem sets will be posted on Sakai. Some will be due during recitation and others will be due before during class.

Recitation Costa Rican Genetic Diversity Group Project:

A detailed assignment will be distributed via Sakai. The goal of this project is to examine a societal issue in Costa Rica that can be solved with the help of genetics (examples include issues around genetically modified crops in agriculture, conservation, and mixed heritage populations in medicine). Two recitation periods will be slated to the project and outside class time will be used too. Students will choose at least one journal article (primary literature) to discuss as a group with a preliminary report on what their final group project will look like (podcast, video, public service pamphlet). Grades for this group project will be part of the recitation grade.

Grading

The material taught in class meetings and recitation will both be tested and the grades are combined for the final course grade. Your grade for this course will be determined as follows:

- 2 midterm exams = (21% each = 42%)
- 1 cumulative final exam (24%)
- MasteringGenetics and other graded assignments (10%)

Participation in class (10%)

Recitation (14%)

Grades will not be assigned for individual exams, only points. Final grades will be assigned on the total number of points for the entire semester: A 93-100; A- 90-92; B+ 87-89; B 83-86; B- 80-82; C+ 77-79; C 73-76; C- 70-72; D+ 66-69; D 60-65; F <60

THE PROFESSORS RESERVE THE RIGHT TO MAKE CHANGES TO THE SYLLABUS, INCLUDING PROJECT DUE DATES AND TEST DATES. THESE CHANGES WILL BE ANNOUNCED AS EARLY AS POSSIBLE

Schedule:

For a detailed schedule, including assigned readings, assignments, recommended readings, and objectives, check the lecture schedule under the Sakai "Syllabus" folder

Course Learning Outcomes

Upon completion of the 202 course in Biology, a student should be able to:

(Skills):

- Build hypotheses to answer a specific scientific question, design an experiment using an appropriate technique/assay to answer the question, and predict results of their experiment.
- Give examples of how advances in genetics and molecular biology, from the discovery of DNA's structure to sequencing individual genomes, have changed the world (examples include recombinant insulin, personalized medicine, transgenic crops)

(Concepts):

- Explain the term "allele" for a single gene at a population, organismal, cellular, and molecular level; explain how dominance and recessiveness are expressed at these levels.
- Explain how genetic variation comes from in a population (e.g. from meiosis, mutation, and epigenetic changes).
- Predict genotypic and phenotypic ratios of offspring in defined genetic crosses and work these problems in reverse (when given data about offspring, determine the genotypes and phenotypes of the parents).
- Deduce modes of inheritance (example: autosomal dominance, x-linked recessive) from genetic pedigrees and explain how incomplete penetrance and variable expressivity complicate these analyses.
- Distinguish single gene traits from polygenic traits and the influence of the environment on traits.
- Explain how DNA is replicated normally and abnormally and how these concepts are utilized in the polymerase chain reaction (PCR).
- Compare and contrast the consequences of germline errors during meiosis (such as non-disjunction, and translocations) and somatic errors during abnormal mitosis (such as non-disjunction and cancer)
- Explain the flow of genetic information, based on the central dogma- from DNA to proteins and how mutations are carried through this flow of information.
- Describe the nature of the genetic code

- Describe the general organization of prokaryotic and eukaryotic genomes, including the identification and significance of the different parts of a gene (e.g. regulatory/non-regulatory, exons/introns; transcription start site; translation start site; UTRs)
- Explain how a gene can be regulated transcriptionally and post-transcriptionally and how this leads to limited expression under different conditions (such as in different environments, during the course of development, or disease conditions)
- Predict the outcome of experimental manipulations in genes (e.g. GFP-tagging to investigate gene expression)
- Describe the basic steps in gene cloning (restriction, ligation, etc.)
- Design a transgenic animal/bacteria, where a protein of interest is specifically produced
- Explain the significance of research in genetic model organisms to understand fundamental biological phenomena.



SPANISH AS A FOREIGN LANGUAGE – 203 INTERMEDIATE 1

ENGLISH SUMMARY (Detailed Spanish Syllabus below)

Description

This course is directed at students with a basic knowledge of Spanish Language who would like to increase rapidly and efficiently their competence to communicate in Spanish, both in the linguistics and the cultural aspects in all four skills: oral and written expression, oral and written comprehension.

INTENSITY

45 horas

NUMBER OF CREDITS

3 (three)

GENERAL OBJECTIVES

Upon completion, students will be able to:

1. Comprehend, while listening, general information on diverse topics
2. Communicate orally efficiently in daily situations that require cultural and linguistic competency
3. Understand written material on familiar or general topics for the student
4. Communicate orally and in written form general information and opinions on daily events

PRACTICAL CONTENT

Upon completion, the student will be able to produce and comprehend with more advanced structures and within a more general context:

1. Describe in present and past tense of objects, places, people and animals
2. Describe and tell present and past events
3. Describe and tell actions in process or in the past
4. Formulate questions and understand responses
5. Express preferences
6. Expressions for giving commands, instructions and directions
7. Expressions for advise and recommendations
8. Expressions of past actions with projection to the present

GRAMMAR CONTENT

1. Rules according to genre, subject and verb
2. Contrast between perfect future and imperfect past tenses
3. Adverbs (“cuando”, “mientras”, “mientras tanto”, “de repente” y “de pronto”) and other expressions y otras expresiones de tiempo para la narración
4. Past tense (“ESTAR”+ gerundio)
5. Uses of adjectives and verbs
6. Perfect past tense
7. Contrast between the past perfect simple and structured
8. Past perfect of the indicative: forms and uses
9. Imperative: regular and irregular in: “usted”, “tú”, “vos” y “nosotros”
10. Affirmative and negative forms:
 - With reflexive pronouns
 - With direct pronouns
 - With indirect pronouns
 - With direct and indirect pronouns
 - Other verbs: “DOLER”, “MOLESTAR”, “ALEGRAR”, “EMOCIONAR”, “PARECER” + adjective, “DAR” + sustantive, “CAER” bien/mal, “PONER” + adjective, “HACER” falta, “FALTAR”, “SOBRAR”, “QUEDAR”, “SABER”, “COSTAR” and others
11. Preposition verbs
12. Other uses and expressions of “por” and “para”
13. Other prepositions: “ante”, “bajo”, “contra”, “hacia”, “según” and “sobre”
14. Pragmatic Connectors: “pero”, “sino”, “sino que”, “además”, “no obstante”, “en primer lugar...” and “sin embargo”

THEMATIC CONTENT

1. Legends, myths and tales
2. Infancy, breeding and life phases
3. Biographies
4. The health: body parts, accidents and emergencies, illness and its treatment
5. Food: recipes
6. Mass media: radio, television and newspapers
7. Immigration
8. Minority groups
9. Political and Economic Systems

ACTIVITIES

Activities are directed at obtaining knowledge and develop skills needed for communicating in daily common situations.

- a. Oral and written descriptions
- b. Reading comprehension of simple textbooks
- c. Listening skills
- d. Oral presentations
- e. Participation in sociocultural activities to provide a context of the local environment
- f. Participation in educational activities
- g. Structure and conduct an interview

EVALUATION

- Four written exams 40%
- Four oral presentations 20%
- Homework 30%
- Participation 10%

BIBLIOGRAPHY

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- Terrell, Tracy, et. al.. *Dos Mundos*. Mc Graw Hill, 1998
- Viquez Alf, Lillyam Rojas y Marta Rojas. *Español 9*. San José .Edit. UCR, 1996
- Zayas- Bazán, Eduardo y Bacon, Susan. *Arriba comunicación y cultura*. Printice Hall, INC, 2001.

DESCRIPCIÓN

El curso va dirigido a estudiantes con un nivel básico de conocimientos de la lengua española, y que requieran aumentar, en forma rápida y eficiente, su competencia comunicativa en español, tanto lingüística como cultural, en las cuatro destrezas por desarrollar: expresión oral, expresión escrita, comprensión oral y comprensión de lectura.

INTENSIDAD

45 horas

NÚMERO DE CRÉDITOS

3 (tres)

OBJETIVOS GENERALES

Al finalizar el curso, el o la estudiante estará en capacidad de:

1. Comprender, al escuchar, información general sobre temas diversos
2. Expresarse oralmente con eficacia en situaciones comunicativas cotidianas o generales, que requieran cierto grado de competencia lingüística y cultural
3. Comprender material escrito sobre temas familiares para el estudiante o sobre temas generales
4. Comunicar, en forma oral y escrita, información general y opiniones sobre hechos cotidianos

CONTENIDOS FUNCIONALES

Al finalizar el curso, el o la estudiante podrá, con estructuras más elaboradas y en contextos generales, producir y comprender:

1. Descripción en presente y pasado de objetos, lugares, personas y animales
2. Descripción y narración de hechos presentes y pasados
3. Descripciones y narraciones de acciones presentes y pasadas en proceso
4. Formulación de preguntas y comprensión de respuestas
5. Expresiones de gusto y preferencia
6. Expresiones para dar órdenes, instrucciones y direcciones
7. Expresiones de consejos y recomendaciones
8. Expresiones de acciones pasadas con proyección al presente

CONTENIDOS GRAMATICALES

1. Reglas de concordancia (género y número; sujeto y verbo)
2. Contraste entre pretérito perfecto simple y pretérito imperfecto de indicativo.
3. Adverbios (“cuando”, “mientras”, “mientras tanto”, “de repente” y “de pronto”) y otras expresiones de tiempo para la narración
4. Acciones pasadas en progreso (“ESTAR”+ gerundio)
5. Usos del participio en función adjetiva y en función verbal
6. Pretérito perfecto compuesto de indicativo
7. Contraste entre pretéritos perfectos: simple y compuesto
8. Pluscuamperfecto de indicativo: formación y usos
9. Imperativo: regulares e irregulares en: “usted”, “tú”, “vos” y “nosotros”
10. Forma afirmativa y negativa:

- con pronombres reflexivos
 - con pronombres directos
 - con pronombres indirectos
 - con pronombres directos e indirectos
11. Otros verbos especiales como: “DOLER”, “MOLESTAR”, “ALEGRAR”, “EMOCIONAR”, “PARECER” + adjetivo, “DAR” + sustantivo, “CAER” bien/mal, “PONER” + adjetivo, “HACER” falta, “FALTAR”, “SOBRAR”, “QUEDAR”, “SABER”, “COSTAR” y otros
 12. Verbos con preposición
 13. Otros usos y expresiones de “por” y “para”
 14. Otras preposiciones: “ante”, “bajo”, “contra”, “hacia”, “según” y “sobre”
 15. Conectores pragmáticos: “pero”, “sino”, “sino que”, “además”, “no obstante”, “en primer lugar...” y “sin embargo”

CONTENIDOS TEMÁTICOS

1. Leyendas, mitos y cuentos
2. Infancia, crianza y períodos de la vida
3. Biografías
4. La salud: las partes del cuerpo, accidentes y emergencias, enfermedades y su tratamiento
5. La comida: recetas
6. Los medios de comunicación: radio, televisión y prensa
7. La inmigración
8. Grupos minoritarios
9. Sistemas políticos y económicos

ACTIVIDADES

Las actividades estarán dirigidas a adquirir los conocimientos y a desarrollar las habilidades y destrezas necesarias para comunicarse en situaciones tanto rutinarias como no.

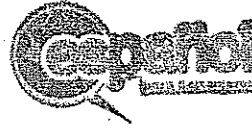
- h. Hacer descripciones, narraciones y exposiciones en forma oral y escrita.
- i. Leer y analizar textos sencillos empleando estrategias discursivas y de lectura.
- j. Escuchar grabaciones (canciones, diálogos, anuncios, mensajes telefónicos, documentales, etc.), para realizar actividades de comprensión auditiva.
- k. Practicar estrategias discursivas orales mediante presentaciones, simulaciones, etc.
- l. Participar en actividades que lo vinculen con el contexto sociocultural en el que está inmerso.
- m. Participar en actividades lúdicas y educativas (trabalenguas, adivinanzas, bingo, etc.).
- n. Estructurar y realizar una entrevista.

EVALUACIÓN

- | | |
|--------------------------------|-----|
| • Cuatro exámenes escritos | 40% |
| • Cuatro presentaciones orales | 20% |
| • Tareas | 30% |
| • Participación | 10% |

BIBLIOGRAFÍA

- Canteli Dominicis, María y Johan J Reynolds. *Repase y Escriba*. John Wiley and Sons, INC. New York, 1994.
- McVey Gill, Mary, et. alt. *En Contacto*. Sexta edición. Harcourt Brace Collage Publishers, 1999.
- Miraño López, Julia. *Y, ahora, la gramática*. Edicions Universitat de Barcelona, 1999.
- Terrell, Tracy, et. alt.. *Dos Mundos*. Mc Graw Hill, 1998
- Viquez Alí, Lillyam Rojas y Marta Rojas. *Español 9*. San José .Edit. UCR, 1996
- Zayas- Bazán, Eduardo y Bacon, Susan. *Arriba comunicación y cultura*. Printice Hall, INC, 2001.



ESPAÑOL PARA EXTRANJEROS – 204 INTERMEDIO 2

DESCRIPCIÓN

El curso va dirigido a estudiantes con un nivel intermedio de conocimientos de la lengua española, y que requieran afianzar e incrementar, en forma rápida y eficiente, su competencia comunicativa en español, tanto lingüística como cultural, en las cuatro destrezas por desarrollar: expresión oral, expresión escrita, comprensión oral y comprensión de lectura.

INTENSIDAD : 45 horas

NÚMERO DE CRÉDITOS: 3 (tres)

OBJETIVOS GENERALES

Al finalizar el curso, el o la estudiante estará en capacidad de:

1. Comprender información general o detallada sobre temas diversos
2. Expresarse eficazmente en forma oral, en situaciones comunicativas no cotidianas que requieran una mayor competencia lingüística y cultural
3. Comprender material escrito sobre temas no cotidianos que requieran una mayor competencia lingüística y cultural
4. Comunicar en forma escrita información y opiniones sobre la mayor parte de temas específicos

CONTENIDOS FUNCIONALES

Al finalizar el curso, el o la estudiante podrá, con estructuras de mayor complejidad y en una variedad de contextos, producir y comprender:

1. Descripción y narración sobre temas tanto concretos como abstractos
2. Formulación rechazo y aceptación de peticiones e invitaciones
3. Expresiones de gusto y preferencia
4. Expresiones de gratitud, disculpa, obligación y consejo
5. Expresiones de sentimiento: alegría, tristeza, admiración y sorpresa
6. Expresiones para hacer peticiones
7. Expresiones para dar opiniones
8. Comparación de diferentes situaciones y temas actuales y culturales
9. Conexión de oraciones para expresarse en párrafos
10. Expresiones de acciones futuras en relación con el momento en que se habla
11. Expresiones de acciones hipotéticas
12. Contraste entre conjeturas desde el presente y el pretérito
13. Expresiones de deseos y sentimientos hacia otras personas

CONTENIDOS GRAMATICALES

1. Imperativo: formas tú y vos, afirmativas y negativas
2. Contrastes de pretéritos de indicativo: simples y compuestos
3. Futuro simple: formación y usos
4. Condicional simple: formación y usos básicos en indicativo
5. Contraste entre futuro simple y condicional simple
6. Estructuras para indicar condición: usos del “si” condicional con presente de indicativo y de preposición “de” + infinitivo + condicional

7. Usos de las formas no personales del verbo: gerundio, participio e infinitivo
8. Otros verbos con preposición
9. Otros conectores pragmáticos
10. Voz pasiva. Oraciones pasivas con "se"
11. Presente de subjuntivo. Introducción, conjugación de verbos regulares e irregulares, Usos con expresiones impersonales, verbos de deseo, emoción y duda

CONTENIDOS TEMÁTICOS

1. Estados civiles
2. Las vacaciones (planes futuros)
3. Predicciones el horóscopo y pronóstico del tiempo
4. La tecnología
5. La globalización
6. El ambiente y la ecología
7. La educación
8. Celebraciones
9. Costumbres y supersticiones
10. Plantas medicinales y medicina alternativa
11. Creencias populares

ACTIVIDADES

Las actividades estarán dirigidas a adquirir los conocimientos y a desarrollar las habilidades y destrezas necesarias para comunicarse en situaciones diversas.

1. Hacer descripciones, narraciones y exposiciones en forma oral y escrita
2. Leer y analizar textos que requieran mayor competencia lingüística y cultural, empleando estrategias discursivas y de lectura
3. Escuchar grabaciones (canciones, comentarios, noticias, textos literarios, etc.), para realizar actividades de comprensión auditiva
4. Practicar estrategias discursivas orales mediante presentaciones, debates, mesas redondas, etc.
5. Redacción de cartas, anuncios, recetas de cocina, invitaciones y artículos sobre el contenido temático del programa

EVALUACIÓN

• Cuatro exámenes escritos	40%
• Cuatro presentaciones orales	20%
• Tareas	30%
• Participación	10%

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- Terrell, Tracy, et. alt. Dos Mundos. Mc Graw Hill, 1998.
- Viquez Alf, Lillyam Rojas y Marta Rojas. Español 9. San José. Edit. UCR, 1996.
- Zayas- Bazán, Eduardo y Bacon, Susan. Arriba comunicación y cultura. Printice Hall, INC, 2001.

BIO 202: Introduction to Molecular Biology & Genetics
SPAN 203: Intermediate Spanish I
Summer 2016 Costa Rica

Professor: Dr. Kelly Hogan, and Brian Hogan
 Location: classrooms at UCR, office hours: after class

MASTER CALENDAR IS SUBJECT TO CHANGE

Día	BIO 202 M-F 9:00-11:00	SPAN 203 or 204 M-F 13:00-15:00
MAY/JUNE		
Thursday 26	<i>Travel Day from the US</i>	
Friday 27	Onsite orientations at UCR	Onsite orientation continues
Monday 30	Course introduction; the five themes of Biology; pre-test and the process of science	<i>Introduction Talk: Central American Historical Overview</i>
Tuesday 31	<ul style="list-style-type: none"> Structure & function of genes, genomes, and chromosomes How genetic information is organized in the genome 	SPAN 203
Wednesday 1	<ul style="list-style-type: none"> How genetic information flows from DNA to RNA to protein AND Variation in genetic information- from genotype to phenotype 	SPAN 203
Thursday 2	<i>Recitation: Breast cancer case study. A right to her genes. BRCA case study: group project assignment description of learning activity</i>	SPAN 203
Friday 3	Process of Science: Discovery of the structure and function of DNA	SPAN 203
Monday 6		
	<ul style="list-style-type: none"> Process of science: Discovery of how DNA replicates How genetic information is copied <i>in vivo</i> and <i>in vitro</i> 	SPAN 203
Tuesday 7	<i>Recitation: PCR and its applications in Paternity Tests and Ecological Conservation</i>	SPAN 203
Wednesday 8	How genetic variation arises by gene mutation (mutagens and mitosis)	<i>Guest Speaker Talk: Costa Rican Contemporary Society & Culture Overview</i>
Thursday 9	<ul style="list-style-type: none"> How genetic variation arises by recombination during meiosis How errors in meiosis lead to genetic variation 	SPAN 203
Friday 10	<i>Recitation: Meiosis and Group Project time</i>	SPAN 203
JUNE		
Monday 13	Exam 1	SPAN 203
Tuesday 14	<i>Recitation: Crowdsourcing to solve science problems</i>	SPAN 203
Wednesday 15	Balancing unequal amounts of information between males and females: Dosage Compensation	SPAN 203
Thursday 16	The flow of genetic information from DNA to RNA	SPAN 203
Friday 17	Field excursion to rainforest National Park/ Talk on Environmental Issues/Actions	<i>Field excursion to rainforest National Park</i>
JUNE		
Monday 20	The flow of genetic information from RNA to proteins	SPAN 203
Tuesday 21	<i>Recitation: BLAST search with colon cancer case study: group project working time</i>	SPAN 203
Wednesday 22	Regulating the flow of information in prokaryotes I	SPAN 203

Thursday 23	Regulating the flow of information in eukaryotes	SPAN 203
Friday 24	Exam 2	SPAN 203
JUNE/JULY		
Monday 27	Transmission of information from one species to another: Recombinant DNA Technology	SPAN 203
Tuesday 28	Transmission of information from one species to another: Making a GMO (UNC FOOD THEME!)	SPAN 203
Wednesday 29	<i>Recitation: Presentation of Costa Rican genetic diversity learning activities</i>	SPAN 203
Thursday 30	<ul style="list-style-type: none"> • Transmission of independently assorting traits • Pedigrees and human disease 	SPAN 203
Friday 1	Human disease and epigenetics	SPAN 203
JULY		
Monday 4	<ul style="list-style-type: none"> • Modifications of Mendelian ratios: single gene traits • Gene interactions and complementation 	SPAN 203
Tuesday 5	<ul style="list-style-type: none"> • Transmission of linked traits • Course wrap-up with "Information" theme. 	SPAN 203
Wednesday 6	<i>Finals</i>	<i>Finals / Closing Reception evening</i>
Thursday 7	Travel Day back to the US	