

**Graduate Council Curriculum Committee**  
**October 13, 2010**  
**3:30 p.m., MH 395**

**Agenda**

1. Welcome and call to order
2. Review of BSBS split classes (tabled at the last meeting), COM
3. Title change and course revisions to the Global and Comparative Education graduate certificate, CED
4. Courses and special topics
5. Adjournment

**Members of the Graduate Council Curriculum Committee:**

Patricia Bishop, Ex officio, AA  
Deborah Breiter, RCHM  
Honghui Chen, CBA  
Tosha Dupras, COS-Chair  
Jane Gibson, COM  
Naim Kapucu, COHPA  
Anne Norris, CON  
Joyce Nutta, CED  
Max Poole, Liaison, CGS  
Tison Pugh, CAH  
Martin Richardson, COP  
Terrie Sypolt, Libraries  
Sergio Tafur, GSA  
James Turkson, COM  
Art Weeks, CECS



## Program Recommendation Form

**This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs.**

College/Unit(s) Submitting Proposal: Education/School of Teaching, Learning & Leadership Proposed Effective Term/Year: Spring 2011

Unit(s) Housing Program: School of Teaching, Learning, and Leadership

Name of Program and/or track: Global, International and Comparative Education

**Brief Statement of Program Change:** (for suspensions or deletions of degree programs, tracks or certificates, please attach on a separate sheet the rationale for this action, including statement of how this action impacts faculty teaching in and students enrolled in the program, track or certificate. Please note the units that have been consulted if duplication of programs or conflict of interest with other units has occurred.)

Please check one: this action affects a:  Program  Track  Certificate

Please check one: this action is a(n):  Addition  Inactivation  Deletion  Revision  
 Temporary Suspension of Admissions: Length of Suspension \_\_\_\_\_

**Temporary suspension of admissions:** the program will be removed from the online application. A notation will be entered in the graduate catalog indicating the length of the suspension of admissions.

**Inactivation:** the program will be removed from the online application. Admissions will be suspended to new students. A notation will be entered in the catalog to indicate that the program is being deleted. If students are currently in the program, the program will remain in the graduate catalog. Once the last students have graduated, the program will be removed from the catalog.

**Deletions:** the program will be removed from the online application. Admissions will be suspended to new students. A notation will be entered in the catalog to indicate that the program is being deleted. If students are currently in the program, the program will remain in the graduate catalog. Once the last students have graduated, the program will be removed from the catalog and deleted in all university records.

### For program, track, or certificate additions or revisions:

- Will students be moved from an existing program or track into this new program or track?  Yes  No  
If yes, state the name of the program or track where students are currently enrolled: Global and Comparative Education
- Are you changing the name of an existing program or track?  Yes  No  
If yes, provide the new name of the program or track: Global, International, and Comparative Education  
Provide the name of the current program or track: Global and Comparative Education  
When is the name change effective? Immediately, upon approval  
Please Note: A name change will be effective on all diplomas on the effective date of change. This may affect students currently enrolled or those newly admitted.
- Are you requesting a CIP Code change?  Yes  No  
If yes, old CIP \_\_\_\_\_ new CIP \_\_\_\_\_
- A "marked up" catalog copy MUST be included showing the changes for the existing description.

### For program, track, and certificate inactivation or deletions:

- Are students currently enrolled in the program?  Yes  No
- If yes, attach a "teach out" plan for all current students specifying how they can finish the program or where students will be placed if being moved to another program. The "teach out" plan should specify when courses will be offered to enable students to finish.

**RECOMMENDATIONS**

Yes  No

Department Chair: \_\_\_\_\_

Date: 8/30/2010

Yes  No

College Curriculum Committee Chair: \_\_\_\_\_

Date: 8/30/2010

Yes  No

College Dean or Unit Head: \_\_\_\_\_

Date: 08-30-10

Yes  No

Chair, UPCC or GSC: \_\_\_\_\_

Date: \_\_\_\_\_

Yes  No

Dean, Undergraduate Studies or Graduate Studies: \_\_\_\_\_

Date: \_\_\_\_\_

Approval: \_\_\_\_\_

Provost: \_\_\_\_\_

Date: \_\_\_\_\_

**Distribution: After approval is received from the Provost, distribution will be to:**

Department(s)

Associate Registrar

Faculty Senate

College

Institutional Research

Information, Analysis & Assessment

Registrar

Academic Services

*Statement of Program Change  
Graduate Certificate in Global & Comparative Education*

*College of Education  
School of Teaching, Learning and Leadership  
September 1, 2010*

*(Contact: Karen Biraimah, 3-2428, Biraimah@mail.ucf.edu)*

This statement summarizes the proposed changes to the Global and Comparative Education Graduate Certificate.

**1. Proposed Name Change:**

- Current: Global and Comparative Education
- Proposed: Global, International, and Comparative Education

Rationale: Revised name more accurately reflects revised program content.

**2. Change in Total Hours Required**

- None

**3. Changes to Global and Comparative Education Core:**

<b>Current Core Courses (12 Hrs.)</b>	<b>Proposed Core Courses (12 Hrs.)</b>
<ul style="list-style-type: none"> <li>• EDF 6809: Introduction to Comparative and International Education</li> <li>• SSE 5391: Global Education: Theory and Practice</li> <li>• EDF 6884: Education as a Cultural Process</li> <li>• EDF 6886: Multicultural Education</li> </ul>	<ul style="list-style-type: none"> <li>• EDF 6809: Introduction to Comparative and International Ed.</li> <li>• SSE 5391: Global Education: Theory and Practice</li> <li>• EDF 6XXX: Equitable Educational Opportunity and Life Chances: A Cross-National Analysis</li> <li>• EDS 6XXX: Education and National Development</li> </ul>

**4. Changes to Approved Electives:**

<b>Current Approved Electives (3 Hrs.)</b>	<b>Proposed Approved Electives (3 hr)</b>
<ul style="list-style-type: none"> <li>• EDF 6707: Gender &amp; Education: Cross-Cultural Perspectives (or)</li> <li>• EDF 6865: Policy and Practice of Language in International Education</li> </ul>	<ul style="list-style-type: none"> <li>• EDG 6XXX: Exploring Global Educational Issues in Int'l. Contexts (or)</li> <li>• EEC 6606: International Perspectives on Early Childhood Development (or)</li> <li>• Other graduate courses with Program Coordinator's Approval</li> </ul>

### **Rationale:**

UCF's College of Education continually seeks to be innovative in its approach to meeting the needs of students in the Twenty-first century, including their ability to embrace the challenges of an increasingly interdependent world. While the initial Graduate Certificate in Global and Comparative Education began this journey, it was too broadly focused on cultural and multicultural themes which did not necessarily address specific concepts and perspectives directly linked to global and international education issues. Moreover, it did not provide any course for students to experience cultures beyond that of the U.S., either through service-learning field work or through course content. To move beyond these limitations, the original Graduate Certificate in Global and Comparative Education has been revised to provide a greater focus on educational issues directly linked to global and international perspectives.

### **Revision Goals:**

With this rationale in mind, the revised Global, International, and Comparative Education Graduate Certificate has been designed to accomplish two goals:

1. Provide a program which offers courses with a clearer focus on global, international and comparative education issues, perspectives, and theories.
2. Provide electives that reflect global, international, and comparative education themes, while providing opportunities for students to apply this knowledge in international field experiences with service-learning opportunities.

### **Strategies for Accomplishing Program Goals:**

Revisions incorporated within the Graduate Certificate in Global, International, and Comparative Education create a more cohesive program designed to better prepare teachers to infuse cutting-edge global perspectives within their classrooms, and other professionals to work successfully in international and cross-cultural settings, bilateral and multilateral organizations, NGOs (non-governmental organizations), and/or state and federal government departments. These strategies include providing students with courses more directly linked to global, international and comparative education issues as well as providing opportunities to participate in courses and academic field experiences that move beyond the confines of the US.

### **Ongoing Individual and Program Assessment**

Data collected for Institutional Effectiveness and from focus groups will be collected and reviewed annually to assess student performance and appraisal of program outcomes.

### **Market Analysis:**

The Graduate Certificate in Global, International, and Comparative Education is designed for persons who intend to work in international and cross-cultural settings, bilateral and multilateral organizations, state and federal government departments and/or schools. Given the receding physical and cultural barriers through globalization, there is now a growing need for professionals with a keen understanding of the political, social, and economic phenomena that impact teaching, learning and instructional leadership in the global arena, and especially within developing nations. This program is particularly useful for graduate students interested in

working within international organizations such as the World Bank and UNESCO, the US Department of State, NGOs such as *Save the Children*, and international schools.

Numerous Holmes Scholars continue to indicate interest in this program, and it will play a significant role in the CED's Peace Corps Fellows/USA Masters Program (which is currently under review, with a final acceptance notification date of December 2010).

With the exception of this revised graduate certificate program, the College of Education currently offers no graduate courses directly related to global, international or comparative education. Further, no specific education courses related to the preparation of professionals who wish to work within the global education arena have been identified. The Graduate Certificate in Global, International, and Comparative Education does not conflict with any of UCF's current certificate programs as listed on the website of the Office of Graduate Studies.

As one of the largest universities in the US, with a strategic international location, it behooves UCF to develop programs that focus on global and international perspectives. Moreover, this program reinforces the goals of UCF and of the College of Education which are clearly articulated in President Hitt's third goal: *To provide international focus to our curricula and research programs* and through a Strategic Goal of the College of Education to *Promote international initiatives and global perspectives*.

**Implementation:**

Immediately following approval of these program changes, recruitment will be reinstated in fall 2010, with course rotations to commence in spring 2011.

**Effect on Other Units**

The proposed changes should have no significant effects on other units within the College of Education, as three of the four core courses are offered by the School of Teaching, Learning, and Leadership (EDF 6809, SSE 5391, and EDF 6XXX), with one course (EDS 6XXX) offered by the Department of Educational & Human Sciences. Moreover, one of the two electives is offered by the School of Teaching, Learning and Leadership (EDG 6XXX), while the other elective (EEC 6606) is currently offered by the Department of Child, Family & Community Sciences.

**Administration:**

Dr. Karen Biraimah will continue to administer the revised graduate certificate program, and will serve as the advisor for certificate program students. Dr. Biraimah has been a faculty member at UCF for 26 years, and was chair of the Department of Educational Studies for the past 11 years before assuming her current role as Co-Director of the School of Teaching, Learning, and Leadership. She has extensive international education experience, and has served as President of the Comparative and International Education Society and as a Board Member of the World Council of Comparative Education Societies.

## **Participating Graduate Faculty Members**

- Dr. Karen Biraimah, Professor & Co-Director, School of Teaching, Learning, and Leadership (EDF 6809, EDF 6XXX and/or EDG 6XXX)
- Dr. Tammy Boyd, Assistant Professor, Department of Educational and Human Sciences, (EDS 6XXX)
- Dr. Gillian Eriksson, Instructor, School of Teaching, Learning, and Leadership (EDF 6XXX and/or EDG 6XXX)
- Dr. Randall Hewitt, Associate Professor, School of Teaching, Learning, and Leadership (EDF 6XXX and/or SSE 5391)
- Dr. William Russell, Assistant Professor, School of Teaching, Learning and Leadership (SSE 5391)
- Dr. Judit Szente, Assistant Professor, Department of Child, Family & Community Sciences (EEC 6608)

## **CURRENT PROGRAM:**

Global and Comparative Education Graduate Certificate

### **Program Description**

The Graduate Certificate in Global and Comparative Education prepares teachers and other professionals who wish to work in international and cross-cultural settings, bilateral and multilateral organizations, and/or state and federal government departments.

### **Curriculum**

#### **Total Required Hours: 15 Semester Hours Beyond the Bachelor's Degree**

The Graduate Certificate in Global and Comparative Education requires a minimum of 15 credit hours beyond the bachelor's degree. The curriculum includes 12 credit hours of instructional core courses and one 3 hour credit course from program electives.

#### Required Core Courses – 15 Credit Hours

- EDF 6809: Introduction to Comparative and International Education (3 credit hour)
- SSE 5391: Global Education: Theory and Practice (3 credit hours)
- EDF 6884: Education as a Cultural Process (3 credit hours)
- EDF 6886: Multicultural Education (3 credit hours)

#### Elective Course – 3 Credit Hours

- EDF 6707: Gender & Education: Cross-Cultural Perspectives (3 credit hours) **or**
- EDF 6865: Policy and Practice of Language in International Education (3 credit hours)

**REVISED PROGRAM:**

**Global, International, and Comparative Education Graduate Certificate**

**Program Description**

The Graduate Certificate in Global, International, and Comparative Education prepares teachers for PK-12 classrooms and other professionals who wish to work in international and cross-cultural settings, NGOs, bilateral and multilateral organizations, and/or state and federal government departments.

**Curriculum**

**Total Required Hours: 15 Semester Hours Beyond the Bachelor's Degree**

The Graduate Certificate in Global, International, and Comparative Education requires a minimum of 15 credit hours beyond the bachelor's degree. The curriculum includes 12 credit hours of instructional core courses and one 3 hour credit course from program electives.

**Required Core Courses – 15 Credit Hours**

- EDF 6809: Introduction to Comparative and International Education (3 credit hour)
- SSE 5391: Global Education: Theory and Practice (3 credit hours)
- EDF 6XXX: Equitable Educational Opportunity and Life Chances: A Cross-National Analysis (3 credit hours)
- EDS 6XXX: Education and National Development (3 credit hours)

**Elective Course – 3 Credit Hours**

- EDG 6XXX: Exploring Global Educational Issues in International Contexts (3 credit hours) **or**
- EEC 6606: International Perspectives on Early Childhood Development **or**
- Other graduate courses with Program Coordinator's approval

**5. Library Resources**

## Global and Comparative Education

### Databases

Name	UCF	FSU	Boston U	U Penn	U Minn	Vanderbilt	Iowa
Africa Wide: NiPAD			X		X		X
Africana Periodical Literature Bibliographic Database <a href="http://www.africabib.org/africa.html">http://www.africabib.org/africa.html</a> Can substitute for Africa Wide NiPAD until Ph.D level is reached	X		X	X			
Anthropology Plus	X	X	X	X	X	X	X
<b>Bibliography of Asian Studies (UCF needs this one)</b>			X	X	X	X	X
CIAO: Columbia International Affairs Online	X	X		X	X	X	X
Contemporary Women's Issues	X	X	X	X	X		
Database of Research on International Education <a href="http://www.idp.com/research/database_of_research.aspx">http://www.idp.com/research/database_of_research.aspx</a> Add to list	X		X	X		X	X
Dissertations & Thesis Full Text	X	X	X	X	X	X	X
Education Full-Text	X		X	X	X	X	X
ERIC	X	X	X	X	X	X	X
Handbook of Latin American Studies	X	X	X	X	X	X	X
HAPI: Hispanic American Periodicals Index	X	X	X	X	X	X	X
IBSS: International Bibliography of the Social Sciences				X		X	
Institute of Developmental Studies (IDS) Info Service <a href="http://www.ids.ac.uk/ids/info/">http://www.ids.ac.uk/ids/info/</a>						X	
Linguistics and Language Behavior Abstracts (LLBA)	X	X	X	X	X	X	X
<b>OECD Education iLibrary (UCF purchased 8-1-10)</b>	X	X	X	X	X	X	X
PAIS	X	X	X	X	X	X	X
PolicyArchive <a href="https://www.policyarchive.org/">https://www.policyarchive.org/</a> Add to list	X					X	
PolicyFile				X	X		
Resources on South African Higher Education <a href="http://africa.msu.edu/SAHE/">http://africa.msu.edu/SAHE/</a>						X	
<b>SA ePublications (purchase indiv. Journal titles from if UCF pursues an African concentration of student recruits)</b>				X		X	

Name	UCF	FSU	Boston U	U Penn	U Minn	Vande rbilt	Iowa
Sociological Abstracts	x		x	x	x	x	x
Sociology of Education Abstracts			x				
OECD iLibrary (UCF purchased Education portion only) <a href="http://puck.sourceoecd.org/vl=1221085/cl=32/nw=1/rpsv/home.htm">http://puck.sourceoecd.org/vl=1221085/cl=32/nw=1/rpsv/home.htm</a>		x	x	x	x	x	x
U S Agency for International Development <a href="http://www.usaid.gov/">http://www.usaid.gov/</a>	x		x	x	x	x	x
U S Network for Education Information – Non U S Education Systems <a href="http://www.ed.gov/about/offices/list/ous/international/usnei/international/edlite-non-us.html">http://www.ed.gov/about/offices/list/ous/international/usnei/international/edlite-non-us.html</a>	x	x	x	x	x	x	x
UK Council for International Student Affairs <a href="http://www.ukcisa.org.uk/">http://www.ukcisa.org.uk/</a>	x	x	x	x	x	x	x
UNdata <a href="http://data.un.org/">http://data.un.org/</a>	x	x	x	x	x	x	x
UNESCO <a href="http://portal.unesco.org/en/ev.php-URL_ID=29008&amp;URL_DO=DO_TOPIC&amp;URL_SECTION=201.html">http://portal.unesco.org/en/ev.php-URL_ID=29008&amp;URL_DO=DO_TOPIC&amp;URL_SECTION=201.html</a>	x	x	x	x	x	x	x
UNESCO – Education <a href="http://www.unesco.org/en/education">http://www.unesco.org/en/education</a>	x	x	x	x	x	x	x
UNESCO Documents and Publications <a href="http://unesdoc.unesco.org/ulis/">http://unesdoc.unesco.org/ulis/</a>	x	x	x	x	x	x	x
United Nations Official Document System <a href="http://documents.un.org/">http://documents.un.org/</a>	x	x	x	x	x	x	x
Web of Science	x		x	x	x	x	x
World Bank E-library (paid database) <a href="http://oberon.worldbank.catchword.org/vl=3717429/cl=30/nw=1/rpsv/home.htm">http://oberon.worldbank.catchword.org/vl=3717429/cl=30/nw=1/rpsv/home.htm</a>				x		x	x
UCF needs if a graduate degree is pursued)							
World Bank Documents & Reports <a href="http://www-">http://www-</a>	x	x	x	x	x	x	x

Name	UCF	FSU	Boston U	U Penn	U Minn	Vanderbilt	Iowa
<a href="http://wds.worldbank.org/WBSITE/EXTERNAL/EXTWDS/0,,detailPageMenuPK:64187510~menuPK:64187513~pagePK:64187848~piPK:64187934~searchPageMenuPK:64187283~siteName:WDS~theSitePK:523679,00.html">wds.worldbank.org/WBSITE/EXTERNAL/EXTWDS/0,,detailPageMenuPK:64187510~menuPK:64187513~pagePK:64187848~piPK:64187934~searchPageMenuPK:64187283~siteName:WDS~theSitePK:523679,00.html</a>							
World Bank Education <a href="http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,menuPK:282391~pagePK:149018~piPK:149093~theSitePK:282386,00.html">http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,menuPK:282391~pagePK:149018~piPK:149093~theSitePK:282386,00.html</a>	X	X	X	X	X	X	X
WorldCat	X	X	X	X	X	X	X
World Development Indicators	X	X	X	X	X	X	
World News Connection	X		X		X	X	X
Worldwide Political Science Abstracts	X		X	X	X	X	X

\***[Africa-Wide: NiPAD](#)**  \$4,430.00 annually (Needed only if Ph.D is pursued)

An electronic information resource which is an aggregation of 40 bibliographic databases from around the world. Databases include Index to South African Periodicals, Ibiscus, the database from the Africa Institute, African Journal Online, Media Africa, and NAMLIT which is compiled from the national Library of Namibia. Africa-Wide is a multidisciplinary database and with access to over 2.4 million records is unique in its extensive coverage on the subject of Africa, including information written on and about Africa and offering access to African research. The records and abstracts are derived from journal articles, research reports, conference proceedings, grey literature, books, monographs, theses and dissertations. Subscribers to Africa-Wide include public libraries, universities, African and South African Institutes and governmental departments. Africa-Wide includes abstracts and direct links to full text, author contact information, links to publisher's websites and information on holding libraries.

\***[Bibliography of Asian Studies \(BAS\) / University of Michigan](#)**  \$1,200.00 annually (Still needed)

This on-line version of the Bibliography of Asian Studies (BAS) contains more than 410,000 records on all subjects (especially humanities and social sciences) pertaining to East, Southeast, and South Asia published worldwide from 1971 to the present.

**[International Bibliography of the Social Sciences](#)** \$6,083.00 annually (Not necessary for certificate program)

Also Known as: IBSS CSA

From **[CSA Databases](#)**

**Description:** Bibliographic citations and subject indexing for the international journal article and book literature in anthropology, economics, political science, and sociology. Produced by British Library of Political and Economic Science, London School of Economics and Political Science, with the support and assistance of International Committee for Social Science Information and Documentation and UNESCO.

**Sources:** Articles from approximately 3700 journals are described, 2300 journals on a regular basis; more than 120,000 books and journal special-issue collections; book chapters and book reviews. Roughly one-third of covered journals are from outside North America and western Europe, drawing upon publications from over 105 countries and [95 different languages](#). Materials are mostly reflective of the holdings of the British Library of Political and Economic Science, and other University of London and London-based specialist libraries, including Institute of Commonwealth Studies, School of Oriental and African Studies.

**Holdings:** Covers 1951 to the present in three separate files.

**\*OECD Education iLibrary \$790.00 annually**  has been purchased

. The Organisation for Economic Co-operation and Development publications cover a wide variety of topics, all dedicated to helping governments and citizens understand and take on the challenges of a globalised world. OECD Education iLibrary is the online library of e-books in the field of education. [[Info](#)] [Full Text Resource!](#)

**If we subscribe to all of SourceOECD like the other institutions, the cost is over \$100,000.00 annually. However, UCF has now subscribed to the Education portion of the OECD iLibrary.**

**\*World Bank E-Library** \$7,293.00 annually. *Some* of the education portion of World Bank is now freely available so we are ok at the certificate level.

Fulltext PDF-format collection of more than 1,200 World Bank books, including all new titles and selected titles beginning in 1984. Topics covered include: agriculture, education, environment, finance,... (UCF does not have the paper copies)

Database Analysis: To support the proposed Global and Comparative Education program, the UCF Libraries need the following databases:

- AfricaWide: NiPD \$4,430.00 will be needed if we elect to support a Ph.D program. Otherwise AfricaBib now freely available will suffice.
- Bibliography of Asian Studies (\$1200.00 annually)
- SourceOECD entire collection is needed. However, that collection is over \$100,000 so I am including only the OECD Education iLibrary which includes the books, publications and journals in the area of education. \$790.00 Was purchased 8-2010

- World Bank E-Library \$7,293.00. Some of the education portion now freely available.

**Total needed for databases = \$ 1,200.00**

### Journals

Journal Name	UC F	FSU	Bosto n U	U Pen n	U Min n	Van der bilt	Iow a
African Journal of Education Studies (Kenya)				x			x
Asia Pacific Journal of Education	x	x	x	x	x	x	x
Asia Pacific Journal of Teacher Education	x	x	x	x	x	x	x
Australian Educational Researcher	x	x	x	x	x	x	x
Australian Journal of Education	x	x	x	x	x	x	x
Australian Journal of Teacher Education	x	x	x	x	x	x	x
British Educational Research Journal	x	x	x	x	x	x	x
Canadian Journal of Education	x	x	x	x	x	x	x
Canadian Journal of Educational Administration and Policy	x	x	x	x	x	x	x
China Academic Journals				x	x		x
Chinese Education and Society	x	x	x	x	x	x	x
Comparative Education	x	x	x	x	x	x	x
Comparative Education Review	x	x	x	x	x	x	x
Compare	x	x	x	x	x	x	x
Education and Society	x	x	x	x	x	x	x
Education in Taiwan		x					
Education Policy Analysis Archives	x	x	x	x	x	x	x
Zhonghua min guo jiao yu tong ji = Educational statistics of the Republic of China		x	x	x	x	x	x
Elementary Education Online (Turkey)	x	x		x			
Estudios Pedagogicos (Chile)	x	x	x	x	x	x	x
European Education	x	x	x	x	x	x	x
European Journal of Education	x	x	x	x	x	x	x
European Journal of Teacher Education	x	x	x	x	x	x	x

Journal Name	UC F	FSU	Boston U	U Penn	U Minn	Vanderbilt	Iowa
Frontiers of Education in China <a href="http://www.springerlink.com/content/119913/?p=e5d30bb6b3b84a93ae9254564593f707&amp;pi=0">http://www.springerlink.com/content/119913/?p=e5d30bb6b3b84a93ae9254564593f707&amp;pi=0</a> Add to list., 2006-	x	2006-2008	x	x	x	x	x
Globalisation, societies and education <a href="http://www.informaworld.com/smpp/title~content=t713423352~db=all">http://www.informaworld.com/smpp/title~content=t713423352~db=all</a> , 2003- Add to list	x	x	x	x	x	x	x
Higher Education in Europe (UK)	x	x	x	x	x	x	x
<b>Higher Education Management and Policy</b> <i>Currently available via Informaworld temporarily</i> <a href="http://www.informaworld.com/smpp/title~db=all~content=t713431525">http://www.informaworld.com/smpp/title~db=all~content=t713431525</a> , 1997-  <i>Available soon from OECD Education iLibrary</i>	x	x Currently received OECD	x Current also (OECD)	x Currently received	x Current also	x	x Like UCF
International Education <a href="http://vnweb.hwwilsonweb.com/hww/Journals/getIssues.jhtml?sid=HWW%3AOMNIFT&amp;issn=0160-5429">http://vnweb.hwwilsonweb.com/hww/Journals/getIssues.jhtml?sid=HWW%3AOMNIFT&amp;issn=0160-5429</a> 1996- Correct link	x	x	x	x	x	x	x
International Journal for Educational Integrity <a href="http://www.ojs.unisa.edu.au/index.php/IJEI">http://www.ojs.unisa.edu.au/index.php/IJEI</a> , 2006- Add to list	x	x	x	x	x	x	x
<b>International Education Journal: Comparative Perspectives</b> , 1999- (Australia) Current year \$250.00. Archives available freely online at <a href="http://www.iejcomparative.org/archives.php">http://www.iejcomparative.org/archives.php</a>	x 199 - 200 7	x Like UCF	x Like UCF	x	x Current also	x	x
International Education Studies <a href="http://ccsenet.org/journal/index.php/ies">http://ccsenet.org/journal/index.php/ies</a> , 2008- Add to list	x	x	x	x	x	x	x
International Journal of Disability, Development and Education <a href="http://www.informaworld.com/smpp/title~content=t713425407~db=all">http://www.informaworld.com/smpp/title~content=t713425407~db=all</a> , 1997- Add to list	x	x		x	x	x	x

Journal Name	UC F	FSU	Boston U	U Penn	U Minn	Vanderbilt	Iowa
International Journal of Early Childhood		x					
International Journal of Early Childhood Special Education (Turkey)	x		x	x	x	x	x
<b>International Journal of Education</b> <a href="http://www.macrothink.org/journal/index.php/ije/issue/archive">http://www.macrothink.org/journal/index.php/ije/issue/archive</a> Free 2010 with archives	x	x	x	x	x	x	x
International Journal of Education Policy and Leadership	x	x	x	x	x	x	x
International Journal of Educational Development	x	x	x	x	x	x	x
International Journal of Educational Management	x	x	x	x		x	x
International Journal of Educational Policy, Research and Practice		x	x	x	x	x	x
<b>International Journal of Educational Research added 2010 via ScienceDirect</b>	x	x	x	x	x	x	x
International Journal of Educational Technology (1999-2002 online)*	x	x	x	x	x	x	x
International Journal of Inclusive Education (UK)	x	x	x	x	x	x	x
International Journal of Social Sciences Add to list	x	x	x	x	x	x	x
International Journal of Teaching and Learning in Higher Education	x	x	x	x	x	x	x
International Review of Education	x	x	x	x	x	x	x
Irish Educational Studies	x	x	x	x	x	x	x
Irish Journal of Education	x	x	x		x	x	x
Journal of Education for International Development	x	x	x	x	x	x	x
<b>Journal of Higher Education in Africa</b> (Africa) \$200.00			x	x	x	x	x
Journal of Research in International Education	x	x	x	x	x	x	x
Journal of Studies in International Education	x	x	x	x	x	x	x
Middle East Education News Wire	x	x	x	x	x	x	x
New Horizons in Education (Hong Kong)	x	x	x	x	x	x	x
Open Access Journals in the Field of Education	x	x	x	x	x	x	x
Oxford Studies in Comparative Education	x		x	x	x	x	x
<b>Perspectives in Education</b> (Johannesburg, South Africa) \$120.00 annually							x
<b>Research in Comparative and International Education</b> \$628.00 annually		2006-2008				x	

Journal Name	UCF	FSU	Boston U	U Penn	U Minn	Vanderbilt	Iowa
Russian Education and Society	x	x	x	x		x	x
South African Journal of Education (2006- ) <a href="http://www.sajournalofeducation.co.za/index.php/saje">http://www.sajournalofeducation.co.za/index.php/saje</a>	x	x	x	x	x	x	x
<b>South African Journal of Higher Education \$300.00 annually</b>				x	x		
Studies in Comparative and International Education (ceased 2008)					x	x	
Worlds of Education (Belgium)	x		x	x	x	x	x

Journal Analysis: Basically UCF's journal collection in the area of Global and Comparative Education is sound. Key titles missing are bolded in the above list. The one title we definitely needed to add was The International Education Journal. It is now available free upon individual registration.

\*\*\*International Journal of Education, essential. **Now freely available. Users must register.**

<http://www.macrothink.org/journal/index.php/ije/issue/archive>

As the number of Chinese students increase, UCF may need to order China Academic Journals. This is later, of course.

#### Books

Published > 1984	UCF	FSU	Boston U	U Penn	U Minn	Vanderbilt	Iowa
Comparative education	153	126	61	157	196	149	120
Cross cultural orientation	46	40	21	32	62	62	46
Education and globalization	35	32	14	51	67	42	26
International education	66	38	68	64	99	45	57
International education United States	44	21	25	31	52	27	31
Multicultural education	231	139	367	167	265	151	151
<b>Total</b>	<b>575</b>	<b>396</b>	<b>556</b>	<b>502</b>	<b>741</b>	<b>476</b>	<b>431</b>
	<b>1.0</b>	<b>.69</b>	<b>.97</b>	<b>.87</b>	<b>1.29</b>	<b>.83</b>	<b>.75</b>

Book Collection Analysis: UCF Libraries holdings compare favorably to the institutional holdings used for comparison.

## MEMO

**To:** Karen Biraimah, Co-director, School of Teaching, Learning & Leadership;  
Michael Hynes, Co-director, School of Teaching, Learning & Leadership;  
Richard Gause, Reference Librarian;  
Michael Arthur, Head Acquisitions & Collections;  
Mary Page, Associate Director for Collections & Technical Services;  
Barry Baker, Library Director;  
Patricia Bishop, Vice Provost & Dean, UCF College of Graduate Studies

**From:** Terrie Sypolt, Reference Librarian

**Date:** August 27, 2010

**Subject:** Global and Comparative Education, graduate certificate program review

Recommendations are based upon a proposed graduate certificate program in Global and Comparative Education. Should UCF wish to upgrade the program to a graduate degree, additional materials—both journals and databases—will be needed.

Since last year's collection evaluation, the UCF Libraries has purchased a database and has acquired several journal titles. For a graduate certificate in Global and Comparative Education, the Libraries will need the database Bibliography of Asian Studies @ **\$1,200.00 annually:**

An updated analysis of the UCF collection is attached. Comparisons were made with the following programs: Florida State University, Boston University, University of Pennsylvania, University of Minnesota, Vanderbilt and Iowa University.

**Books:** The book collection is satisfactory for a graduate certificate program.

**Journals:** For a graduate certificate, the journal titles that are available are satisfactory. Articles from others may be acquired through Interlibrary Loan. However, remember that no more than 5 articles can be requested through ILL for any one journal title before UCF faces a copyright fee.

- *Higher Education Management and Policy* became available once we purchased OECD Education iLibrary
- *International Education Journal: Comparative Perspectives* archives became freely available on the web. Current year costs \$250.00 and would need to be purchased if this became a graduate program.
- *International Journal of Education* currently available on the web
- *International Journal of Educational Research* was added 2010 via ScienceDirect

**Databases:** Needed for the graduate certificate: Bibliography of Asian Studies @ **\$1,200.00 annually**. Our Asian holdings are weak currently. This is particularly true if the prospective students we are recruiting for the program are from Asia.

The UCF Libraries has acquired the OECD Education iLibrary for \$790.00 annually. This will provide students with full-text access to the OECD book collection as well as to OECD statistics and the journal *Higher Education Management and Policy*.

For a graduate certificate program, the World Bank Education free materials on the web will suffice. If, however, this program becomes a graduate degree, UCF will need to purchase World Bank E-Library for \$7,293.00 annually

For the graduate certificate program, AfricaBib suffices. If UCF elects to upgrade this graduate certificate program into a graduate degree, UCF will need to provide money to purchase select titles from the SA\_E Publications. \$2,500.00 annually for electronic access to select African education journals. If prospective graduate students are recruited from Africa, this is especially true.

**Total money needed for a graduate certificate program in Global and Comparative Education = \$1,200.00 annually**

**Total money needed for a Master's degree program in Global and Comparative Education = \$12,000.00 annually**

## ~~Global and Comparative Education Certificate~~Global, International, and Comparative Education Graduate Certificate

### PROGRAM DESCRIPTION

~~Effective Fall 2009, this program is no longer accepting applications.~~

~~The Graduate Certificate in Global, International, and Comparative Education prepares teachers for PK-12 classrooms and other professionals who wish to work in international and cross-cultural settings, NGOs, bilateral and multilateral organizations, and/or state and federal government departments.~~

~~The Graduate Certificate in Global and Comparative Education provides education and training in theoretical, methodological, critical and practical issues associated with education around the world for students and education professionals.~~

[Read More ▼▲](#)

### CURRICULUM

~~The Graduate Certificate in Global, International, and Comparative Education requires a minimum of 15 credit hours beyond the bachelor's degree. The curriculum includes 12 credit hours of instructional core courses and one 3 hour credit course from program electives.~~

~~Students in the Graduate Certificate in Global and Comparative Education program must complete five courses (15 credit hours total), four required courses and one elective. Courses may be taken out of sequence.~~

#### **Total Credit Hours Required:**

~~15 Credit Hours Minimum beyond the Bachelor's Degree~~Semester Hours Beyond the Bachelor's Degree

#### **Required Courses—~~125~~12 Credit Hours**

- EDF 6809 Introduction to Comparative and International Education (3 credit hours)
- SSE 5391 Global Education: Theory and Practice (3 credit hours)

- EDF ~~6884-6XXX Education as a Cultural Process~~Equitable Educational Opportunity and Life Chances: A Cross-National Analysis (3 credit hours)
- EDF-EDS ~~6886-6XXX Multicultural Education~~Education and National Development (3 credit hours)

### Elective Courses—3 Credit Hours

Choose one ~~of these two courses~~ elective course.

- ~~EDF 6865 Policy and Practice of Language in International Education~~EDG 6XXX: Exploring Global Educational Issues in International Contexts (3 credit hours) **or**
- ~~EDF 6707 Gender and Education: Cross-Cultural Perspectives~~EEC 6606: International Perspectives on Early Childhood Development (3 credit hours) **or**
- Other graduate courses with Program Coordinator's Approval

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## Application Requirements

Admission is open to those with a bachelor's degree from a regionally accredited institution. An application to the graduate certificate program and official transcripts must be submitted. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

## Contact Info

### Graduate Program

*Karen Biraimah PhD*

[biraimah@mail.ucf.edu](mailto:biraimah@mail.ucf.edu)

Telephone: 407-823-~~2884~~2428  
ED 209B 

### Graduate Admissions

*Christopher LeGoullon*

[gradadmissions@mail.ucf.edu](mailto:gradadmissions@mail.ucf.edu)

Telephone: 407-823-2766

Millican Hall 230 

[Online Application](#)

[Graduate Admissions](#)

*Mailing Address*

UCF College of Graduate Studies  
Millican Hall 230  
PO Box 160112  
Orlando, FL 32816-0112

*Institution Codes*

GRE: 5233  
GMAT: RZT-HT-58  
TOEFL: 5233  
ETS PPI: 5233

**PCB 5XXX Molecular Immunology**  
**Spring 2011**  
**Dr. Annette Khaled**

<b>Contacting the Professor</b>	<b>The Class</b>
<b>Office Hrs.</b> By appointment.	<b>Meeting time:</b> TuTh 1:30-2:45 PM
<b>Office:</b> Lake Nona 355; BRA 108	<b>Place:</b>
<b>Phone:</b> 407 266-7035	<b>Course URL:</b>
<b>Email:</b> <a href="mailto:akhaled@mail.ucf.edu">akhaled@mail.ucf.edu</a>	<a href="https://webcourses.ucf.edu/webct/logon/823472416041">https://webcourses.ucf.edu/webct/logon/823472416041</a>

**Course Description:** A graduate lecture course covering the fundamental functions of the human immune system, focusing on cellular and molecular aspects of the innate and adaptive immune response.

**Course Objectives:** Graduate Students will gain an understanding of how the cells and molecules of the immune system provide defense against invading pathogens and will apply this knowledge to critically evaluate novel research findings in the field of immunology. Graduate students will also gain an appreciation for how diseases that affect the normal function of the immune system result from aberrations in the molecular events that drive the immune response.

**Required Materials:** Required text: Cellular and Molecular Immunology, Abbas, Lichtman, Pillai. Updated Edition 6. Older editions are not acceptable. Recommended but not required material: i-clicker classroom response system remote. Students are responsible for registering their remote at [www.iclicker.com](http://www.iclicker.com).

**Prerequisites:** Students are expected to have successfully completed PCB 3522, Molecular Biology I or an equivalent molecular biology course.

**Evaluation procedures, Requirements and Expectations**

Test	Description	Requirements and Expectations	Weight toward final grade
<b>3 Essay Exams</b>	Short answer essay exams will test material covered in one section of course.	Graduate students are expected to demonstrate an advanced understanding of innate and adaptive immunity to solve biological problems an essay-format. <i>Essay questions will test the ability to think critically about immunological problems.</i>	<b>20%</b> each
<b>1 Review Paper</b>	A 5-8 page review on a novel topic in immunology not covered in the course will be due last week of class. <b>Topic must be first approved by the instructor.</b>	To write a review paper, graduate students are expected to (1) Chose a topic area in immunology, (2) Critically read the literature published in this topic area, and (3) Write a 5-8 page review that demonstrates their mastery of conceptual knowledge in immunology and the ability to use this knowledge to research a new topic published in the field.	<b>15%</b> total
<b>1 Final exam</b>	Multiple choice questions cumulative exam with emphasis on new material.	In the final exam, graduate students are expected to demonstrate a comprehensive understanding of the fundamentals of immunity taught in the course.	<b>25%</b>

**Additional Policies**

<b>Exams and Paper Topic</b>	Taking exams is mandatory. <b>No</b> make-up exams will be given <i>unless</i> you contact the professor at least <i>7 days before</i> the exam date to schedule a make-up exam. Topic for review paper will be chosen by the student and <i>must</i> be approved by the instructor before Mar.1 <sup>st</sup> . No papers will be accepted without approval of topic by the instructor. Review papers will be due by Apr. 21 <sup>st</sup> .
<b>Academic integrity Classroom behavior</b>	Cheating on exams or any other form of academic dishonesty is an offense that will be dealt with as outlined in the Golden Rule. Academic dishonesty in any form will not be tolerated. See examination policy below. Violations of student academic behavior standards are outlined in The Golden Rule, the University of Central Florida's Student Handbook. See <a href="http://www.ucf.edu/goldenrule/">http://www.ucf.edu/goldenrule/</a> for further details. In the classroom - <b>"Disruptive behavior will not be tolerated."</b>
<b>Examination Policy</b>	Cell phones, hats or any electronic gadgets are not allowed in the classroom during exams. Other than the exam, pen or pencil, no other materials are allowed on the desk or in person during the exam. Students are encouraged to use bathrooms before the start of exams and bathroom breaks during the

	exam will be monitored. Students will be seated appropriately to avoid copying but it is the responsibility of the individual student to avoid any suspicious behavior.
<b>Disability Access</b>	Students with disabilities who need accommodations in this course <i>must contact the professor at the beginning</i> of the semester to discuss needed accommodations. Students who need accommodations must be registered with Student Disability Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.
<b>Office hours</b>	<b>You must make an appointment in advance to meet with the professor.</b> Appointments may be made after class or by phone or email.

**Tentative Schedule.**

<b>Date</b>	<b>#</b>	<b>Topic</b>	<b>Chapters from Abbas</b>	<b>Mode</b>
11-Jan	1	Overview of the immune response/Innate Immunity	1, 2	Class
13-Jan	2	Innate Immunity/Cells and Tissues	2, 3	Class
18-Jan	3	Cells and Tissues/Antibodies and Antigens	3, 4	Class
20-Jan	4	Antibodies and Antigens/MHC	4, 5	Class
25-Jan	5	Antigen Processing and Presentation	6	Class
27-Jan	6	Antigen Processing/Antigen Receptors	6, 7	Class
1-Feb	7	REVIEW		Class
3-Feb	8	<b>ESSAY EXAM I</b>	<b>1-7</b>	
8-Feb	9	Lymphocyte Development	8	Class
10-Feb	10	Lymphocyte Development	8	Class
15-Feb	11	Activation of T cells	9	Class
17-Feb	12	Activation of T cells/ B-cell Activation	9, 10	Class
22-Feb	13	B-cell Activation	10	WEB
24-Feb	14	Tolerance	11	Class
1-Mar	15	REVIEW and <i>APPROVAL OF PAPER TOPIC</i>		Class
3-Mar	16	<b>ESSAY EXAM II</b>	<b>8-11</b>	
7-12 Mar		<i>Spring Break</i>		
15-Mar	17	Cytokines	12	Class
17-Mar	18	Effector Mechanisms: Cell-Mediated	13	Class
22-Mar	19	Effector Mechanisms: Cell-mediated/Humoral	13, 14	Class
24-Mar	20	Effector Mechanisms: Humoral	14	Class
29-Mar	21	Immunity to Microbes	15	Class
31-Mar	22	Transplantation Immunology	16	Class
5-Apr	23	REVIEW		Class
7-Apr	24	<b>ESSAY EXAM III</b>	<b>12-16</b>	
12-Apr	25	Immunity to Tumors	17	Class
14-Apr	26	Hypersensitivity and Autoimmunity	18	Class
19-Apr	27	Immediate Hypersensitivity	19	Class
21-Apr	28	REVIEW and <i>PAPER DUE</i>		Class
27-Apr		<b>FINAL EXAM</b>	<b>Cumulative</b>	

**PCB 4239 Molecular Immunology**  
**Spring 2011**  
**Dr. Annette Khaled**

<b>Contacting the Professor</b>	<b>The Class</b>
<b>Office Hrs.</b> By appointment.	<b>Meeting time:</b> TuTh 1:30-2:45 PM
<b>Office:</b> Lake Nona 355, BRA 108	<b>Place:</b> CL 1 rm 104
<b>Phone:</b> 407 266-7035	<b>Course URL:</b>
<b>Email:</b> <a href="mailto:akhaled@mail.ucf.edu">akhaled@mail.ucf.edu</a>	<a href="https://webcourses.ucf.edu/webct/logon/823472416041">https://webcourses.ucf.edu/webct/logon/823472416041</a>

**Course Description:** A lecture course for undergraduate students covering the fundamental functions of the human immune system, focusing on cellular and molecular aspects of the innate and adaptive immune response.

**Course Objectives:** Undergraduate students should develop a detailed understanding of how the cells and molecules of the immune system provide defense against invading pathogens and how both the front-line defenses of the innate immune system and the long-term responses generated by adaptive immunity maintain health and biological integrity. How diseases affect the normal function of the immune response and the pathological consequences of these diseases will also be discussed.

**Required Materials:** Required text: Cellular and Molecular Immunology, Abbas, Lichtman, Pillai. Updated Edition 6. *Older editions are not acceptable.* Required material: i-clicker classroom response system remote. Students are responsible for registering their remote at [www.iclicker.com](http://www.iclicker.com).

**Prerequisites:** Students are expected to have successfully completed PCB 3522, Molecular Biology I.

**Evaluation procedures and Requirements and Expectations**

Test	Description	Requirements and Expectations	Weight toward final grade
<b>3 term exams</b>	Multiple choice questions will test material covered in one section of course.	<i>Undergraduate students are expected to acquire a fundamental understanding of the immune system. Multiple choice questions will test the gaining of basic knowledge.</i>	<b>20%</b> each
<b>Attendance</b>	Based on cumulative responses during class using the iclicker classroom response system.	<i>Undergraduate students are expected to actively participate in the lecture by answering questions during lecture using their iclickers. Participation in lecture will demonstrate the ability to listen and learn fundamental concepts.</i>	<b>15%</b> total. Attend 15 or more lectures. Attendance will be determined by answering questions with iclicker.
<b>Final exam</b>	Multiple choice questions cumulative exam with emphasis on new material.	<i>In the final exam, undergraduate students are expected to demonstrate a comprehensive understanding of immunology.</i>	<b>25%</b>

**Additional Policies**

<b>Attendance and Exams</b>	Attendance at lectures is expected and will be evaluated using the iclicker classroom response system. Attendance at 15 or more lectures is required for full credit. Taking exams is mandatory. <b>No</b> make-up exams will be given <i>unless</i> you contact the professor at least <i>7 days before</i> the exam date to schedule a make-up exam.
<b>Academic integrity Classroom behavior</b>	Cheating on exams or any other form of academic dishonesty is an offense that will be dealt with as outlined in the Golden Rule. Academic dishonesty in any form will not be tolerated. See examination policy below. Violations of student academic behavior standards are outlined in The Golden Rule, the University of Central Florida's Student Handbook. See <a href="http://www.ucf.edu/goldenrule/">http://www.ucf.edu/goldenrule/</a> for further details. In the classroom - <b>“Disruptive behavior will not be tolerated.”</b>
<b>Examination Policy</b>	Cell phones, hats or any electronic gadgets are not allowed in the classroom during exams. Other than the exam, pen or pencil, no other materials are allowed on the desk or in person during the exam. Students are encouraged to use bathrooms before the start of exams and bathroom breaks during the exam will be monitored. Students will be seated appropriately to avoid copying but it is the responsibility of the individual student to avoid any suspicious behavior.
<b>Disability Access</b>	Students with disabilities who need accommodations in this course <i>must contact the professor at the</i>

	<i>beginning</i> of the semester to discuss needed accommodations. Students who need accommodations must be registered with Student Disability Services, Student Resource Center Room 132, phone (407) 823-2371, TTY/TDD only phone (407) 823-2116, before requesting accommodations from the professor.
<b>Office hours</b>	<b>You must make an appointment in advance to meet with the professor.</b> Appointments may be made after class or by phone or email.

***Tentative Schedule. \*Attendance using iClicker classroom response system will be recorded at these lectures.***

<b>Date</b>	<b>#</b>	<b>Topic</b>	<b>Chapter</b>	<b>Mode</b>
11-Jan	1	Overview of the immune response/Innate Immunity	1, 2	Class
13-Jan	2	Innate Immunity/Cells and Tissues	2, 3	Class
18-Jan	3	Cells and Tissues/Antibodies and Antigens *	3, 4	Class
20-Jan	4	Antibodies and Antigens/MHC*	4, 5	Class
25-Jan	5	Antigen Processing and Presentation*	6	Class
27-Jan	6	Antigen Processing/Antigen Receptors*	6, 7	Class
1-Feb	7	REVIEW*		Class
3-Feb		<b>ESSAY EXAM I</b>	<b>1-7</b>	
8-Feb	8	Lymphocyte Development*	8	Class
10-Feb	9	Lymphocyte Development*	8	Class
15-Feb	10	Activation of T cells*	9	Class
17-Feb	11	Activation of T cells/ B-cell Activation*	9,10	Class
22-Feb	12	B-cell Activation*	10	WEB
24-Feb	13	Tolerance*	11	Class
1-Mar	14	REVIEW*		Class
3-Mar		<b>ESSAY EXAM II</b>	<b>8-11</b>	
7-12 Mar		<i>Spring Break</i>		
15-Mar	15	Cytokines*	12	Class
17-Mar	16	Effector Mechanisms: Cell-Mediated*	13	Class
22-Mar	17	Effector Mechanisms: Cell-mediated/Humoral*	13, 14	Class
24-Mar	18	Effector Mechanisms: Humoral*	14	Class
29-Mar	19	Immunity to Microbes*	15	Class
31-Mar	20	Transplantation Immunology*	16	Class
5-Apr	21	REVIEW*		Class
7-Apr		<b>ESSAY EXAM III</b>	<b>12-16</b>	
12-Apr	22	Immunity to Tumors*	17	Class
14-Apr	23	Hypersensitivity and Autoimmunity*	18	Class
19-Apr	24	Immediate Hypersensitivity*	19	Class
21-Apr	25	REVIEW*		Class
27-Apr		<b>FINAL EXAM</b>	<b>Cumulative</b>	

## **PCB5\*\*\*: Biomedical Informatics: Structure Analysis**

Spring 2011, Tuesdays and Thursdays 3:00-4:15pm

Instructor: Xiaoman Li

Office: HEC210

Office hour: Tuesdays and Thursdays 2-3pm

### **Description**

This course is for graduate students in Biomedical Science and Biology. It focuses on tools and resources in bioinformatics. Topics include miRNA, RNA structure, protein motifs, protein structure, protein-DNA interaction, and so on. Different from classical Bioinformatics courses that target on method development, this course aims to teach students useful tools and resources in bioinformatics, and the idea behind these tools and resources, which will benefit their research.

### **Prerequisite**

Students should have taken undergraduate molecular biology or equivalent courses in order to be enrolled. Talk with the instructor for special consideration.

### **Textbook**

There is no required textbook. All class contents are based papers and are provided in the lecture slides.

### **Requirements and Performance Expectation**

There will be four 5-minute exams in class (20%), a 50-minute paper presentation on a research topic (30%) followed by a 15-minute presentation on comparisons of two tools on the same research topic (10%), an 8-page review as the final exam (40%). For the presentations, graduate students need to choose a bioinformatics topic, select 3 to 5 papers on the chosen topic, and present the topic within 50 minutes. In addition, the students need to present the comparisons of two programs on the same topic in 15 minutes. The topic, the tools, and the papers need to be approved by the instructor in the first three weeks. The presentation slides need to be submitted one month before the presentation. In the last lecture, the students also need to submit a final review of 8 pages based on the selected topic. Graduate students will be assessed on their presentations and review papers in regard to the ability to apply their understanding of the subject area to critique the published literature and to propose new bioinformatics directions.

Through this course, students are expected to know common bioinformatics tools and resources for structure analysis, and to apply them to studying new topics. In the final review, students should show their understanding of related tools taught in the class and should propose at least two future bioinformatics directions on the topic selected.

### **Grading**

In-class-short exams (20%), presentations (40%), final exam (40%). The final grade will be A, B, C, D, or F.

### **Main topics:**

#### miRNA analysis

1. miRNAs
2. miRNA and gene expression
3. miRNA expression profiling classify human cancers
4. predict miRNA target genes
5. identify miRNA host genes

#### Predict RNA structure

1. RNA secondary structure
2. estimating "energy" parameters
3. Align and fold
4. Align then fold

#### Predict protein motifs

1. EMI and prosite motifs
2. insight from minimotif and minimotif miner
3. how to predict protein motifs
4. the disorder regions of proteins

#### Predict protein structure

1. importance, CASP, and structure genomics, X-ray crystallography or NMR spectroscopy
2. Ab initio protein modelling
3. Comparative protein modeling: Homology modeling
4. Comparative protein modeling: Protein threading
5. Macromolecular docking
6. molecular dynamics

#### Homology modeling for protein-DNA interaction

1. protein-DNA docking
2. Connecting protein structure with predictions of regulatory site
3. Ab initio prediction of transcription factor targets using structural knowledge

## **PCB4\*\*\*: Biomedical Informatics: Structure Analysis**

Spring 2011, Tuesdays and Thursdays 3:00-4:15pm

Instructor: Xiaoman Li

Office: HEC210

Office hour: Tuesdays and Thursdays 2-3pm

### **Description**

This course is for undergraduate students in Biomedical Science and Biology. It focuses on tools and resources in bioinformatics. Topics include miRNA, RNA structure, protein motifs, protein structure, protein-DNA interaction, and so on. Different from classical Bioinformatics courses that target on method development, this course aims to teach students useful tools and resources in bioinformatics, and the idea behind these tools and resources, which will benefit their research.

### **Prerequisite**

Students should have taken undergraduate molecular biology or equivalent courses in order to be enrolled. Talk with the instructor for special consideration.

### **Textbook**

There is no required textbook. All class contents are based papers and are provided in the lecture slides.

### **Requirements and Performance Expectation**

There will be four 5-minute exams in class (20%), a 15-minute tool presentation followed by 5-minute questions (40%), a 2-page summary of bioinformatics thoughts as the final exam (40%). For the presentation, a student needs to compare two programs for the same purpose in 15 minutes. The programs chosen need to be discussed and approved by the instructor in the first three weeks. The presentation slides need to be submitted one month before the presentation. For the 2-page summary, a student needs to summarize what they have learned about structure analysis, and to propose at least two questions that can be solved by applying the tools and resources mentioned in the class.

Through this course, students are expected to know common bioinformatics tools and resources for structure analysis. In the presentation and the final summary, students are expected to be able to apply tools and resources taught in the class.

### **Grading**

In-class-short exams (20%), tool presentation (40%), final exam (40%). The final grade will be A, B, C, D, or F.

### **Main topics:**

miRNA analysis

1. miRNAs
2. miRNA and gene expression
3. miRNA expression profiling classify human cancers

4. predict miRNA target genes
5. identify miRNA host genes

#### Predict RNA structure

1. RNA secondary structure
2. estimating "energy" parameters
3. Align and fold
4. Align then fold

#### Predict protein motifs

1. EMI and prosite motifs
2. insight from minimotif and minimotif miner
3. how to predict protein motifs
4. the disorder regions of proteins

#### Predict protein structure

1. importance, CASP, and structure genomics, X-ray crystallography or NMR spectroscopy
2. Ab initio protein modelling
3. Comparative protein modeling: Homology modeling
4. Comparative protein modeling: Protein threading
5. Macromolecular docking
6. molecular dynamics

#### Homology modeling for protein-DNA interaction

1. protein-DNA docking
2. Connecting protein structure with predictions of regulatory site
3. Ab initio prediction of transcription factor targets using structural knowledge

# **Graduate Council Curriculum Committee** **Course Agenda for 10-13-2010**

**Revised**

## **College of Medicine Special Topics**

**This is a split class. Tabled. Requested clarification that shows additional rigor for the graduate class.**

**PCB 5937 Sect 01 COM-Molecular & Microbiology 3(3,0)**

**ST: Biomedical Informatics: Structure Analysis:** PR: PCB 3522 or equivalent or C.I. Introduction of bioinformatics tools and resources on RNA and protein structure analysis. *Occasional.*

30 character abbreviation: **ST:Structure Analysis**

**This is a split class. Tabled. Requested clarification that shows additional rigor for the graduate class.**

**PCB 5937 Sect 01 COM-Molecular & Microbiology 3(3,0)**

**ST: Molecular Immunology:** PR: PCB 3522 or equivalent. Fundamental functions of the human immune system, focusing on cellular and molecular aspects of the innate and adaptive immune response. *Occasional.*

30 character abbreviation: **ST: Molecular Immunology**

*AGENDA NOTES: Course Addition also being proposed.*

**This is a split class. Tabled. Requested clarification that shows additional rigor for the graduate class.**

**PCB 5937 Sect 01 COM-Molecular & Microbiology 3(3,0)**

**ST: Obesity, Diabetes & Metabolic Diseases:** PR: PCB 3522 or BCH 4053 or BSC 6432. Biochemical, molecular and physiological aspects of obesity, diabetes and metabolic diseases and how scientific findings can be translated towards prevention and treatment. *Occasional.*

30 character abbreviation: **ST: Obesity Diabetes & Met Dis**

*AGENDA NOTES: Course Addition also being proposed.*

## **Health & Public Affairs Special Topics**

**HIM 6938 Sect 01 HPA-Health Mangt & Informatic 3(3,0)**

**ST:Health Care Informatics Internship:** PR: HIM 5118C, HIM 6122C and HIM 6123C. A supervised placement of students in approved settings. Students must complete required number of hours and a project under the supervision of an organization preceptor. *Even Spring.*

30 character abbreviation: **ST:Health Care Internship**

*AGENDA NOTES: Course Addition also being proposed.*

## **College of Optics & Photonics Special Topics**

**IDS 6938 Sect 01 OPT-Optics 1(1,0)**

**ST: History of Physical Science, Cultural Connections and Other Issues:** PR: Graduate Standing, C.I. Intended for graduate students in science and math who wish to know more about the "who, how, why, when and where" of physics. *Occasional*.  
30 character abbreviation: **ST:Hist of Phys Sci**

**OSE 6938 Sect 01 OPT-Optics 3(3,0)**

**ST: Vision & Colorimetry:** PR: Graduate standing, C.I. Description of radiant flux visible to the eye, properties of human visual system, ways to describe color quantitatively, and instrumentation options for accomplishing those measurements. *Occasional*.

30 character abbreviation: **ST: Vision & Colorimetry**

### **College of Arts & Humanities Course Action Additions**

**SPW 5XXX CAH-Modern Languages 3(3,0)**

**Jewish Culture in Latin America:** PR: Spanish MA or graduate student proficient in Spanish. History of the arrival of Jews in Latin America and studies Latin American Jewish authors and literature. Will be taught in Spanish, including all readings. *Occasional*.

30 character abbreviation: **Jewish Cult in Latin America**

### **College of Medicine Course Action Additions**

**BCC 7110 COM-Medicine 16(16,0)**

**Core Clerkship in Internal and Family Medicine:** PR: Successful completion of M-2 term. Students will learn care of the adult patient in both inpatient and outpatient settings, with emphasis on diagnosis and treatment in common medical disorders. *Fall, Spring*.

30 character abbreviation: **Core Intrnl & Family Med**

**BCC 7120 COM-Medicine 8(8,0)**

**Core Clerkship in Neurology:** PR: Successful complete of M-2 Term. The neurology clerkship combines clinical neuroscience with neurologic history and examination to enable students to formulate differential diagnosis and treatment plans for common neurologic disorders. *Fall, Spring*.

30 character abbreviation: **Core Clerkship in Neurology**

**BCC 7130 COM-Medicine 8(8,0)**

**Core Clerkship in Obstetrics and Gynecology:** PR: Successful completion of M-2 term. During this 6-week required clerkship, you will be introduced to the obstetric and gynecologic care of women in the outpatient and inpatient settings. *Fall, Spring*.

30 character abbreviation: **Core Clkship in OB/Gyn**

**BCC 7140 COM-Medicine 8(8,0)**

**Core Clerkship in Pediatrics:** PR: Successful completion of M-2 term. This course is a 6 week, required clerkship introducing the student to the general inpatient and outpatient clinical care of children. *Fall, Spring*.

30 character abbreviation: **Core Clerkship in Pediatrics**

**BCC 7150 COM-Medicine 8(8,0)**

**Core Clerkship in Psychiatry:** PR: Successful completion of M-2 Term. Students will participate in patient assessment and treatment, with an emphasis on the most common psychiatric disorders and recognition of cases needing specialty psychiatric referral. *Fall, Spring.*

30 character abbreviation: **Core Clerkship in Psychiatry**

**BCC 7160 COM-Medicine 16(16,0)**

**Core Clerkship in Surgery and Surgical Selectives:** PR: Successful completion of M-2 Term. The Surgery Clerkship will introduce the third year medical student to the evaluation, workup, diagnosis and treatment of a wide variety of surgical disorders. *Fall, Spring.*

30 character abbreviation: **Core Clkshp Surgery & Surg Sel**

**BCC 7190 COM-Medicine 6(6,0)**

**Critical Care Clerkship:** PR: Successful completion of M-3 core clerkships in Internal Medicine and General Surgery and ACLS Provider certification. The Critical Care Clerkship immerses the student in the care of ICU patients focusing technology, multidisciplinary personnel, and physiologic, goal-oriented, humanistic practice in critical illness. *Fall, Spring.*

30 character abbreviation: **Critical Care Clerkship**

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**PCB 5XXX COM-Molecular & Microbiology 3(3,0)**

**Biomedical Informatics : Structure Analysis:** PR: PCB 3522 or equivalent or C.I. Introduction of bioinformatics tools and resources on RNA and protein structure analysis. *Fall.*

30 character abbreviation: **Structure Analysis**

**This is a split class. Tabled. Requested clarification that shows additional rigor for the graduate class.**

**PCB 5XXX COM-Molecular & Microbiology 3(3,0)**

**Molecular Immunology:** PR: PCB 3522 or equivalent. Fundamental functions of the human immune system, focusing on cellular and molecular aspects of the innate and adaptive immune response. *Spring.*

30 character abbreviation: **Molecular Immunology**

*AGENDA NOTES: Special Topic also being proposed.*

**This is a split class. Tabled. Requested clarification that shows additional rigor for the graduate class.**

**PCB 5XXX COM-Molecular & Microbiology 3(3,0)**

**Obesity, Diabetes & Metabolic Diseases:** PR: PCB 3522 or BCH 4053 or BSC 6432. Biochemical, molecular and physiological aspects of obesity, diabetes and metabolic diseases and how scientific findings can be translated towards prevention and treatment. *Odd Spring.*

30 character abbreviation: **Obesity Diabetes & Met Disease**

*AGENDA NOTES: Special Topic also being proposed.*

### College of Education Course Action Additions

**Tabled. Requested clearer, more specific description of what "synthesized what they have learned" meant.**

**ESE 6XXX ED-Teach, Learn & Leadership 2(2,0)**

Capstone Seminar in Secondary Education: PR: ESE 6XXX Intro Seminar in Secondary Education or C.I.

*Revised description: As a culminating experience, this seminar provides students with the opportunity to synthesize what they have learned throughout their Master of Arts in Teaching program through completion of a portfolio and reflective analysis of learning.*

As a culminating experience, this seminar provides students with the opportunity to synthesize what they have learned throughout their Master of Arts in Teaching program. *Occasional.*

30 character abbreviation: **Capstone Seminar in Sec Educ**

### Health & Public Affairs Course Action Additions

**HIM 6XXX HPA-Health Mangt & Informatic 3(3,0)**

Health Care Informatics Internship: PR: HIM 5118C, HIM 6122C and HIM 6123C. A supervised placement of students in approved settings. Students must complete required number of hours and a project under the supervision of an organization preceptor. *Even Spring.*

30 character abbreviation: **Health Care Internship**

*AGENDA NOTES: Special Topic also being proposed.*

### College of Optics & Photonics Course Action Additions

**IDS 6XXX OPT-Optics 1(1,0)**

History of Physical Science, Cultural Connections & Other Issues: PR: Graduate Standing, C.I. This course is designed for graduate students in science who wish to know something about the "who, how, why, when and where" of physics. *Spring.*

30 character abbreviation: **His Phy Sci Cult Conn & Oth Is**

### College of Medicine Course Action Revisions

**This is a split class. Tabled. Requested clarification that shows additional rigor for the graduate class.**

**PCB 6596 ~~Bioinformation and Genomics~~ 3(3,0)**

**PCB 5XXX Biomedical Informatics: Sequence Analysis**

~~PR: Admission to Biomolecular Sciences Ph.D. of C.I.~~ PR: PCB 3522 or equivalent or C.I.

~~New scientific approaches, technologies, and tools for analysis of genomic data-genome sequencing projects.~~

Introduction of useful bioinformatics tools and resources on sequence analysis.

30 character abbreviation: **Biomed Informatics Sequence**

### Health & Public Affairs Course Action Revisions

**PLA 6486 ~~Administrative Law for Criminal Justice Professionals~~ 3(3,0)**

**Administrative Law**

PR: Graduate standing or C.I.

~~The study of administrative law and procedure on the federal, state and local levels, with particular emphasis on Florida criminal justice administration.~~

The study of administrative law and procedure on the federal, state and local levels.

30 character abbreviation: **Administrative Law**

**PAD 7026 ~~Advanced Seminar in Public Administration~~ 3(3,0)**

~~PR: PAD 6053, PAF 7802.~~ PR: Admission to Public Affairs PhD program or C.I.

~~Discuss emerging issues in public administration research using current journal articles and exemplary research in areas such as public management.~~

Discuss emerging issues in public administration research using current journal articles and exemplary research in areas such as public management. May be repeated for credit only when course content is different.

Will now be repeatable for credit.