

Graduate Council Curriculum Committee
September 8, 2014
12:00 p.m., MH 395

Agenda

1. Welcome and call to order
2. General business
 - Introductions
 - Graduate Council Curriculum Committee overview
 - Graduate Council website
 - Dates and start times for meetings
 - Proxy voting
3. Name change to the MSN Adult-Gero Nurse Practitioner track - CON
4. Name change to the DNP Adult-Gero Nurse Practitioner track – CON
5. Name change to the Adult-Gero graduate certificate – CON
6. Joint degree for MD and PhD in Biomedical Sciences - COM
7. Courses and special topics
8. Adjournment

Members of the Graduate Council Curriculum Committee:

Deborah Breiter, Chair, RCHM
Steven Collins, COS
Paul Dombrowski, CAH
Charles Kelliher, CBA
Art Weeks, CECS
Steven Ebert, COM
Linda Gibson-Young, CON
Guifang Li, COP
Donna Malvey, COHPA
Joyce Nutta, CEHP
Terrie Sypolt, LIB
Lucretia Cooney, GSA
Jana Jasinski, CGS Liaison

8/25/14



UNIVERSITY OF CENTRAL FLORIDA
COLLEGE OF GRADUATE STUDIES

Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for both the program and the track.

PLEASE NOTE: The deadline for new tracks or certificates is February 1 of each year. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are due by March 15. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use Track Changes in Word).

College/Unit(s) Submitting Proposal: College of Nursing

Proposed Effective Term/Year: Spring 2015

Unit(s) Housing Program: College of Nursing

Name of program, track and/or certificate: Adult/Gerontology Nurse Practitioner Track - MSN

Brief description of program (this description will show up in the graduate catalog copy): Do not add complete catalog copy here.

As in catalog

DELIVERY - Will program be delivered:



Face to face



Completely online



Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

February 15

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

As in catalog

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Susan K. Chase, susan.chase@ucf.edu, 407-823-6274

12201 Research Parkway, University Tower, Suite 300

www.nursing.ucf.edu

Page 2 of UCF Program Recommendation Form

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

Please check one: this action is a(n):

☐ Addition. Please proceed to Part A.

☒ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

☐ Inactivation

☐ Temporary Suspension of Admissions. Give 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. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Page 3 of UCF Program Recommendation Form

Signature Page

Recommend Approval (all approval levels must be signed)

Department Chair (Print)	<u>SUSAN K. CHASE</u>	(Signature)	<u>Susan K. Chase</u>	Date	<u>8/25/14</u>
College Academic Standards (Print)	<u>Christopher Blackwell</u>	(Signature)	<u>Chris Blackwell</u>	Date	<u>8/25/14</u>
College Dean (Print)	<u>[Signature]</u>	(Signature)	<u>MARY LOU SOLE</u>	Date	<u>8/25/14</u>
Graduate Council (Print)	_____	(Signature)	_____	Date	_____
Graduate Dean (Print)	_____	(Signature)	_____	Date	_____

Approval

Provost and Executive Vice President: _____ Date _____

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

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Page 4 of UCF Program Recommendation Form

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

Rationale for Title of Track Change:

Adult-Gerontology Nurse Practitioner

To

Adult-Gerontology Primary Care Nurse Practitioner

See next page

Since 2000, the University of Central Florida (UCF) College of Nursing (CON) has offered a Master of Science in Nursing (MSN) degree and professional certificate with a focus on adult primary care. Graduates of those programs were prepared for, and eligible to take, the Adult Nurse Practitioner (ANP) board certification examination offered by two national credentialing bodies—the American Nurses Credentialing Center (ANCC) and American Academy of Nurse Practitioners (AANP). With the evolution of healthcare and the aging of the American population, the focus of advanced practice nursing care has slowly shifted to incorporate care of the older adult. In response, a nationwide consortium of professional and regulatory nursing organizations authored a document entitled the APRN Consensus Model (2008) that recommended expansion of the role of the Adult Nurse Practitioner to include formal clinical and didactic preparation in gerontology. As a result of this recommendation, both ANCC (2014) and the AANP (2013) responded by changing their board certification examination content, designed and implemented a plan to phase out the ANP credential, and replaced the ANP credential with the Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP) credential. The UCF CON also responded to these changes swiftly, implementing a change in the ANP curriculum to include both gerontology clinical preparation and didactic content. The track title was changed to Adult-Gerontology Nurse Practitioner to accommodate these changes. However, coupled with the change in the ANP credential by national certifying bodies has been a change in the Acute Care Nurse Practitioner credential to also be inclusive of gerontology. Consequently, there emerged two distinct tracks for Adult-Gerontology Nurse Practitioners—one in primary care and one in acute care. This has resulted in the need to make the title of the primary care UCF CON program more reflective of its specific area of educational and clinical preparation in primary care. Thus, the UCF CON is requesting to formally change the name of this track to Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP). This will eliminate any confusion among which track UCF offers students, allow for correct labeling of this preparation on student diplomas, certificates, and transcripts, and eliminate any confusion by ANCC or AANP in determining eligibility criteria for UCF CON graduates to complete the national AGPCNP certification examination.

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. Remember to attach the catalog copy showing changes, using Track Changes in Word.)

Title change as soon as possible. Changing name to reflect new title name for students who are currently enrolled in the Adult/Gerontology Nurse Practitioner track for spring 2015.

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☒ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☒ Yes ☐ No

Rationale for Title of Track Change:

Adult-Gerontology Nurse Practitioner to Adult-Gerontology Primary Care Nurse Practitioner

Since 2000, the University of Central Florida (UCF) College of Nursing (CON) has offered a Master of Science in Nursing (MSN) degree and professional certificate with a focus on adult primary care. Graduates of those programs were prepared for, and eligible to take, the Adult Nurse Practitioner (ANP) board certification examination offered by two national credentialing bodies—the American Nurses Credentialing Center (ANCC) and American Academy of Nurse Practitioners (AANP). With the evolution of healthcare and the aging of the American population, the focus of advanced practice nursing care has slowly shifted to incorporate care of the older adult. In response, a nationwide consortium of professional and regulatory nursing organizations authored a document entitled the *APRN Consensus Model* (2008) that recommended expansion of the role of the Adult Nurse Practitioner to include formal clinical and didactic preparation in gerontology. As a result of this recommendation, both ANCC (2014) and the AANP (2013) responded by changing their board certification examination content, designed and implemented a plan to phase out the ANP credential, and replaced the ANP credential with the Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP) credential.

The UCF CON also responded to these changes swiftly, implementing a change in the ANP curriculum to include both gerontology clinical preparation and didactic content. The track title was changed to Adult-Gerontology Nurse Practitioner to accommodate these changes. However, coupled with the change in the ANP credential by national certifying bodies has been a change in the Acute Care Nurse Practitioner credential to also be inclusive of gerontology. Consequently, there emerged two distinct tracks for Adult-Gerontology Nurse Practitioners—one in primary care and one in acute care. This has resulted in the need to make the title of the primary care UCF CON program more reflective of its specific area of educational and clinical preparation in primary care. Thus, the UCF CON is requesting to formally change the name of this track to Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP). This will eliminate any confusion among which track UCF offers students, allow for correct labeling of this preparation on student diplomas, certificates, and transcripts, and eliminate any confusion by ANCC or AANP in determining eligibility criteria for UCF CON graduates to complete the national AGPCNP certification examination.

Page 5 of UCF Program Recommendation Form

If yes, provide the new name of the program, track, or certificate:

Adult/Gerontology Primary Care Nurse Practitioner Track

Provide the name of the current program, track, or certificate:

Adult/Gerontology Nurse Practitioner track

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Fall 2014

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

Page 6 of UCF Program Recommendation Form

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

--

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

--

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

--

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support -- assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

*Page 7 of UCF Program Recommendation Form***Checklist of items to be provided:**

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a "teach out" plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The "teach out" plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. Please delete course prefixes and numbers in this section if no teach out plan is required.

Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

8/25/14



UNIVERSITY OF CENTRAL FLORIDA
COLLEGE OF GRADUATE STUDIES

Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for both the program and the track.

PLEASE NOTE: The deadline for new tracks or certificates is **February 1 of each year**. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are **due by March 15**. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions - attach the catalog copy showing changes (use Track Changes in Word).

College/Unit(s) Submitting Proposal: College of Nursing

Proposed Effective Term/Year: Spring 2015

Unit(s) Housing Program: College of Nursing

Name of program, track and/or certificate: DNP Adult/Gerontology Nurse Practitioner Track

Brief description of program (this description will show up in the graduate catalog copy): Do not add complete catalog copy here.

As in catalog

DELIVERY - Will program be delivered:



Face to face



Completely online



Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

February 15

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

As in catalog

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Susan K. Chase, susan.chase@ucf.edu, 407-823-6274

12201 Research Parkway, University Tower, Suite 300

www.nursing.ucf.edu

Page 2 of UCF Program Recommendation Form

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

Please check one: this action is a(n):

- ☐ Addition. Please proceed to Part A.
- ☒ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

☒ Inactivation

☒ Temporary Suspension of Admissions. Give 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. Currently enrolled students will not experience any issues with continued enrollment.

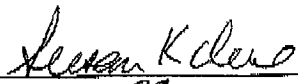
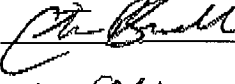


Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Page 3 of UCF Program Recommendation Form

Signature Page

Recommend Approval (all approval levels must be signed)

Department Chair (Print)	<u>SUSAN K. CHASE</u>	(Signature)	<u></u>	Date	<u>8/25/14</u>
College Academic Standards (Print)	<u>Christopher Blackwell</u>	(Signature)	<u></u>	Date	<u>8/25/14</u>
College Dean (Print)	<u></u>	(Signature)	<u></u>	Date	<u>8/25/14</u>
Graduate Council (Print)	_____	(Signature)	_____	Date	_____
Graduate Dean (Print)	_____	(Signature)	_____	Date	_____

Approval

Provost and Executive Vice President: _____ Date _____

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

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Page 4 of UCF Program Recommendation Form

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

Rationale for Title of Track Change:

Adult-Gerontology Nurse Practitioner
To
Adult-Gerontology Primary Care Nurse Practitioner

SEE NEXT PAGE.

Since 2000, the University of Central Florida (UCF) College of Nursing (CON) has offered a Master of Science in Nursing (MSN) degree and professional certificate with a focus on adult primary care. Graduates of those programs were prepared for, and eligible to take, the Adult Nurse Practitioner (ANP) board certification examination offered by two national credentialing bodies—the American Nurses Credentialing Center (ANCC) and American Academy of Nurse Practitioners (AANP). With the evolution of healthcare and the aging of the American population, the focus of advanced practice nursing care has slowly shifted to incorporate care of the older adult. In response, a nationwide consortium of professional and regulatory nursing organizations authored a document entitled the APRN Consensus Model (2008) that recommended expansion of the role of the Adult Nurse Practitioner to include formal clinical and didactic preparation in gerontology. As a result of this recommendation, both ANCC (2014) and the AANP (2013) responded by changing their board certification examination content, designed and implemented a plan to phase out the ANP credential, and replaced the ANP credential with the Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP) credential. The UCF CON also responded to these changes swiftly, implementing a change in the ANP curriculum to include both gerontology clinical preparation and didactic content. The track title was changed to Adult-Gerontology Nurse Practitioner to accommodate these changes. However, coupled with the change in the ANP credential by national certifying bodies has been a change in the Acute Care Nurse Practitioner credential to also be inclusive of gerontology. Consequently, there emerged two distinct tracks for Adult-Gerontology Nurse Practitioners—one in primary care and one in acute care. This has resulted in the need to make the title of the primary care UCF CON program more reflective of its specific area of educational and clinical preparation in primary care. Thus, the UCF CON is requesting to formally change the name of this track to Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP). This will eliminate any confusion among which track UCF offers students, allow for correct labeling of this preparation on student diplomas, certificates, and transcripts, and eliminate any confusion by ANCC or AANP in determining eligibility criteria for UCF CON graduates to complete the national AGPCNP certification examination.

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. Remember to attach the catalog copy showing changes, using Track Changes in Word.)

Title change as soon as possible. Changing name to reflect new title name for students who are currently enrolled in the Adult/Gerontology Nurse Practitioner track for spring 2015.

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☒ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☒ Yes ☐ No

Rationale for Title of Track Change:

Adult-Gerontology Nurse Practitioner to Adult-Gerontology Primary Care Nurse Practitioner

Since 2000, the University of Central Florida (UCF) College of Nursing (CON) has offered a Master of Science in Nursing (MSN) degree and professional certificate with a focus on adult primary care. Graduates of those programs were prepared for, and eligible to take, the Adult Nurse Practitioner (ANP) board certification examination offered by two national credentialing bodies—the American Nurses Credentialing Center (ANCC) and American Academy of Nurse Practitioners (AANP). With the evolution of healthcare and the aging of the American population, the focus of advanced practice nursing care has slowly shifted to incorporate care of the older adult. In response, a nationwide consortium of professional and regulatory nursing organizations authored a document entitled the *APRN Consensus Model* (2008) that recommended expansion of the role of the Adult Nurse Practitioner to include formal clinical and didactic preparation in gerontology. As a result of this recommendation, both ANCC (2014) and the AANP (2013) responded by changing their board certification examination content, designed and implemented a plan to phase out the ANP credential, and replaced the ANP credential with the Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP) credential.

The UCF CON also responded to these changes swiftly, implementing a change in the ANP curriculum to include both gerontology clinical preparation and didactic content. The track title was changed to Adult-Gerontology Nurse Practitioner to accommodate these changes. However, coupled with the change in the ANP credential by national certifying bodies has been a change in the Acute Care Nurse Practitioner credential to also be inclusive of gerontology. Consequently, there emerged two distinct tracks for Adult-Gerontology Nurse Practitioners—one in primary care and one in acute care. This has resulted in the need to make the title of the primary care UCF CON program more reflective of its specific area of educational and clinical preparation in primary care. Thus, the UCF CON is requesting to formally change the name of this track to Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP). This will eliminate any confusion among which track UCF offers students, allow for correct labeling of this preparation on student diplomas, certificates, and transcripts, and eliminate any confusion by ANCC or AANP in determining eligibility criteria for UCF CON graduates to complete the national AGPCNP certification examination.

Page 5 of UCF Program Recommendation Form

If yes, provide the new name of the program, track, or certificate:

Adult/Gerontology Primary Care Nurse Practitioner Track

Provide the name of the current program, track, or certificate:

Adult/Gerontology Nurse Practitioner track

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Fall 2014

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

Page 6 of UCF Program Recommendation Form

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

--

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

--

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

--

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Page 7 of UCF Program Recommendation Form

Checklist of items to be provided:

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B -- For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a "teach out" plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The "teach out" plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. Please delete course prefixes and numbers in this section if no teach out plan is required.

Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

8/25/14



UNIVERSITY OF CENTRAL FLORIDA
COLLEGE OF GRADUATE STUDIES

Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for both the program and the track.

PLEASE NOTE: The deadline for new tracks or certificates is February 1 of each year. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are due by March 15. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). For revisions – attach the catalog copy showing changes (use Track Changes in Word).

College/Unit(s) Submitting Proposal: College of Nursing

Proposed Effective Term/Year: Spring 2015

Unit(s) Housing Program: College of Nursing

Name of program, track and/or certificate: Adult/Gerontology Nurse Practitioner Certificate

Brief description of program (this description will show up in the graduate catalog copy): Do not add complete catalog copy here.

As in catalog

DELIVERY - Will program be delivered:



Face to face



Completely online



Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

September 15

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

As in catalog

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

Susan K. Chase, susan.chase@ucf.edu, 407-823-6274

12201 Research Parkway, University Tower, Suite 300

www.nursing.ucf.edu

Page 2 of UCF Program Recommendation Form

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

Please check one: this action is a(n):

- ☐ Addition. Please proceed to Part A.
- ☒ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

☒ Inactivation

☒ Temporary Suspension of Admissions. Give 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. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Page 3 of UCF Program Recommendation Form

Signature Page**Recommend Approval (all approval levels must be signed)**

Department Chair (Print)	<u>SUSAN K. CHASE</u>	(Signature)	<u>Susan K. Chase</u>	Date	<u>8/25/14</u>
College Academic Standards (Print)	<u>Christopher Blackwell</u>	(Signature)	<u>Chris Blackwell</u>	Date	<u>8/25/14</u>
College Dean (Print)	<u>[Signature]</u>	(Signature)	<u>Mary ConSOLE</u>	Date	<u>8/25/14</u>
Graduate Council (Print)	_____	(Signature)	_____	Date	_____
Graduate Dean (Print)	_____	(Signature)	_____	Date	_____

Approval

Provost and Executive Vice President: _____ Date _____

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

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Page 4 of UCF Program Recommendation Form

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

Rationale for Title of Track Change:

Adult-Gerontology Nurse Practitioner
To
Adult-Gerontology Primary Care Nurse Practitioner

SEE NEXT PAGE

Since 2000, the University of Central Florida (UCF) College of Nursing (CON) has offered a Master of Science in Nursing (MSN) degree and professional certificate with a focus on adult primary care. Graduates of those programs were prepared for, and eligible to take, the Adult Nurse Practitioner (ANP) board certification examination offered by two national credentialing bodies—the American Nurses Credentialing Center (ANCC) and American Academy of Nurse Practitioners (AANP). With the evolution of healthcare and the aging of the American population, the focus of advanced practice nursing care has slowly shifted to incorporate care of the older adult. In response, a nationwide consortium of professional and regulatory nursing organizations authored a document entitled the APRN Consensus Model (2008) that recommended expansion of the role of the Adult Nurse Practitioner to include formal clinical and didactic preparation in gerontology. As a result of this recommendation, both ANCC (2014) and the AANP (2013) responded by changing their board certification examination content, designed and implemented a plan to phase out the ANP credential, and replaced the ANP credential with the Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP) credential. The UCF CON also responded to these changes swiftly, implementing a change in the ANP curriculum to include both gerontology clinical preparation and didactic content. The track title was changed to Adult-Gerontology Nurse Practitioner to accommodate these changes. However, coupled with the change in the ANP credential by national certifying bodies has been a change in the Acute Care Nurse Practitioner credential to also be inclusive of gerontology. Consequently, there emerged two distinct tracks for Adult-Gerontology Nurse Practitioners—one in primary care and one in acute care. This has resulted in the need to make the title of the primary care UCF CON program more reflective of its specific area of educational and clinical preparation in primary care. Thus, the UCF CON is requesting to formally change the name of this track to Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP). This will eliminate any confusion among which track UCF offers students, allow for correct labeling of this preparation on student diplomas, certificates, and transcripts, and eliminate any confusion by ANCC or AANP in determining eligibility criteria for UCF CON graduates to complete the national AGPCNP certification examination.

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. Remember to attach the catalog copy showing changes, using Track Changes in Word.)

Title change as soon as possible. Changing name to reflect new title name for students who are currently enrolled in the Adult/Gerontology Nurse Practitioner track for spring 2015.

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☒ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☒ Yes ☐ No

Rationale for Title of Track Change:

Adult-Gerontology Nurse Practitioner to Adult-Gerontology Primary Care Nurse Practitioner

Since 2000, the University of Central Florida (UCF) College of Nursing (CON) has offered a Master of Science in Nursing (MSN) degree and professional certificate with a focus on adult primary care. Graduates of those programs were prepared for, and eligible to take, the Adult Nurse Practitioner (ANP) board certification examination offered by two national credentialing bodies—the American Nurses Credentialing Center (ANCC) and American Academy of Nurse Practitioners (AANP). With the evolution of healthcare and the aging of the American population, the focus of advanced practice nursing care has slowly shifted to incorporate care of the older adult. In response, a nationwide consortium of professional and regulatory nursing organizations authored a document entitled the *APRN Consensus Model* (2008) that recommended expansion of the role of the Adult Nurse Practitioner to include formal clinical and didactic preparation in gerontology. As a result of this recommendation, both ANCC (2014) and the AANP (2013) responded by changing their board certification examination content, designed and implemented a plan to phase out the ANP credential, and replaced the ANP credential with the Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP) credential.

The UCF CON also responded to these changes swiftly, implementing a change in the ANP curriculum to include both gerontology clinical preparation and didactic content. The track title was changed to Adult-Gerontology Nurse Practitioner to accommodate these changes. However, coupled with the change in the ANP credential by national certifying bodies has been a change in the Acute Care Nurse Practitioner credential to also be inclusive of gerontology. Consequently, there emerged two distinct tracks for Adult-Gerontology Nurse Practitioners—one in primary care and one in acute care. This has resulted in the need to make the title of the primary care UCF CON program more reflective of its specific area of educational and clinical preparation in primary care. Thus, the UCF CON is requesting to formally change the name of this track to Adult-Gerontology Primary Care Nurse Practitioner (AGPCNP). This will eliminate any confusion among which track UCF offers students, allow for correct labeling of this preparation on student diplomas, certificates, and transcripts, and eliminate any confusion by ANCC or AANP in determining eligibility criteria for UCF CON graduates to complete the national AGPCNP certification examination.

Page 5 of UCF Program Recommendation Form

If yes, provide the new name of the program, track, or certificate:

Adult/Gerontology Primary Care Nurse Practitioner Certificate Track

Provide the name of the current program, track, or certificate:

Adult/Gerontology Nurse Practitioner Certificate

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Fall 2014

Will students have the option to stay in their existing program, track, or certificate? ☒ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

--

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

Page 6 of UCF Program Recommendation Form

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

--

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

--

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

--

Part A - Continued

If an addition or there are **substantial REVISIONS** to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

*Page 7 of UCF Program Recommendation Form***Checklist of items to be provided:**

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a "teach out" plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The "teach out" plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. Please delete course prefixes and numbers in this section if no teach out plan is required.

Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)



Program Recommendation Form

This form is to be used to revise, add, suspend, or delete degree programs, tracks, or certificate programs. If there are changes to a program and the changes will affect the program tracks also, one form may be used for both the program and the track.

PLEASE NOTE: The deadline for new tracks or certificates is **February 1 of each year**. Any proposal for new tracks or certificates received after this date will not be included in the next year's catalog. Revisions to existing programs, tracks, or certificates are **due by March 15**. Any proposals for revisions received after that date will not be included in the next year's catalog. Please include catalog copy (description, curriculum, contact information, application requirements, and application deadlines). **For revisions – attach the catalog copy showing changes (use Track Changes in Word).**

College/Unit(s) Submitting Proposal: _____

Proposed Effective Term/Year: _____

Unit(s) Housing Program: _____

Name of program, track and/or certificate: _____

Brief description of program (this description will show up in the graduate catalog copy): **Do not add complete catalog copy here.**

DELIVERY - Will program be delivered: ☐ Face to face ☐ Completely online ☐ Mixed delivery

Admissions deadlines: (Please specify if you have a different deadline for the track than for the program?)

Application requirements: (Please specify if you have different application requirements for the track than for the program? Will you admit directly to the track?)

Program Director(s) and contact information: (name, email, phone, campus address, program website address)

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

Please check one: this action is a(n):

- ☐ Addition. Please proceed to Part A.
- ☐ Revision. If a revision applies to multiple tracks, please list them here and then proceed to Part A:

-
- ☐ Inactivation
- ☐ Temporary Suspension of Admissions. Give 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. Currently enrolled students will not experience any issues with continued enrollment.

Inactivation: Admissions will be suspended for new students and the program will be removed from the online application. Students active in the program are eligible to complete the program under the appropriate criteria and an appropriate teach-out plan is required. The program will be removed from the catalog as of the approved term.

If you checked inactivation or you are temporarily suspending admissions, please go to Part B and complete it.

Signature Page

Recommend Approval (all approval levels must be signed)

Department Chair (Print) _____ (Signature) _____ Date _____

College Academic (Print) _____ (Signature) _____ Date _____
Standards

College Dean (Print) _____ (Signature) _____ Date _____

Graduate Council (Print) _____ (Signature) _____ Date _____

Graduate Dean (Print) _____ (Signature) _____ Date _____

Approval

Provost and Executive Vice President: _____ Date _____

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

Department(s); College; Registrar; Associate Registrar; Institutional Research; Academic Services; Faculty Senate;
University Analysis and Planning Support; College of Graduate Studies

Part A – For additions or revisions of programs, tracks or certificates

Brief statement of rationale: (Please indicate the rationale, how it affects the unit and faculty teaching in and students enrolled in the program, track or certificate.)

For Revisions:

Brief listing of Program Changes: (Please indicate the changes in bullet format. If there are changes to the credit hours of the program, required courses or other requirements, please state those changes. **Remember to attach the catalog copy showing changes, using Track Changes in Word.**)

Will students be moved from an existing program, track, or certificate into this new program, track, or certificate?

☐ Yes ☐ No

If yes, state the name of the program or track where students are currently enrolled and provide a list of students if possible:

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

Name Change

Are you changing the name of an existing program, track, or certificate? ☐ Yes ☐ No

If yes, provide the new name of the program, track, or certificate:

Provide the name of the current program, track, or certificate:

When is the name change effective? Please note: A name change will apply to the record of all students who are currently enrolled, readmitted or newly admitted into this program as of the effective date of this change.

Will students have the option to stay in their existing program, track, or certificate? ☐ Yes ☐ No

If you are requesting a CIP Code change for an existing program, track, or certificate, please provide:

old CIP:

new CIP:

If a name change is your only revision, stop here. Otherwise, complete the rest of Part A.

Part A - Continued

Specify the faculty who will participate in the program, track or certificate and their credentials to do so: (List faculty and a brief paragraph of their credentials.)

Impact of changes on students: Will current students be impacted by the addition or revision of a program, track or certificate? If so, how?

If applicable, provide a written agreement (email is fine) from all involved units that they are in support of, will provide courses to, or will participate in the program, track, or certificate. Please attach the correspondence and also list the units here.

If an addition, provide a statement of who is likely to enroll and why. Please state if there is licensure or certification that depends upon this education, etc. Also, complete the following table.

	Year 1	Year 2	Year 3
Headcount			
SCHs			

If an addition, indicate likely career or student outcomes upon completion: (What will students do? What will their job titles be?)

Part A - Continued

If an addition or there are substantial REVISIONS to existing tracks or certificates, please complete the following table on financial support: (Specify all forms of support – assistantships, fellowships, and tuition remission.)

	No. assistantship students	Source of funds	No. fellowship students (specify fellowship)	No. tuition remissions	Source of funds
Year 1					
Year 2					
Year 3					

Checklist of items to be provided:

- ☐ Electronic graduate catalog copy for additions; track changes included if there are revisions. (required)
- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ Emails showing consultation with other units. (if applicable)
- ☐ If an addition, list of 1-3 students and 1-3 faculty for profiles in the graduate catalog (provide email address so Graduate Studies can contact them to write profiles and take photos). You may provide draft copy of profiles if you wish.
- ☐ If an addition, what disciplines does this program, track or certificate belong to? What other UCF graduate programs, tracks, or certificates are related to it? This information will be used to provide additional links for prospective students to search in the online graduate catalog.

Part B – For inactivations or suspensions of programs, tracks, or certificates

Are students currently enrolled in the program? ☐ Yes ☐ No

If yes, number of current students:

Please specify the intended time period of inactivation or suspension:

If program, track, or certificate is being inactivated or suspended, then attach a “teach out” plan for all current students specifying how they can finish the program or where students will be placed if moving to another program. The “teach out” plan should specify when courses will be offered to enable students to finish. Specify whether students will remain in the existing program to finish, and if so, when the completion date will be, whether students will be moved to another program, etc. Please provide a list of students where applicable.

Sample teach out plan: Enter the terms and courses that will be taught for each term throughout the last semester. **Please delete course prefixes and numbers in this section if no teach out plan is required.**

Fall 2012	Spring 2013	Summer 2013	Fall 2013	Spring 2014

Checklist of items to be provided:

- ☐ Attach all appropriate course action requests that will be necessary to implement the changes. (required)
- ☐ E-mails showing consultation with other units. (if applicable)

(DRAFT PROPOSAL)

NEW MD/PhD Track in Biomedical Sciences

MD REQUIREMENTS (*adapted from current UCF medical school requirements*)

Year 1: Standard MD requirements

- HB-1 (5 credits)
- HB-2 (11 credits)
- HB-3 (5 credits)
- P-1 (7 credits)
- C-1 (4 credits)
- I-1 (5 credits): *Substitute for Lab Rotations (IDS7692L, 3cr) + grad seminar (IDS7690, 2 cr)*

Year 2: Standard MD requirements

- Hematology/Oncology (3 credits)
- Cardio/Pulmonary (5 credits)
- Endocrine/Reproductive (5 credits)
- Gastrointestinal/Renal (5 credits)
- Skin/Musculoskeletal (4 credits)
- Brain/Behaviour (6 credits)
- P-2 (7 credits)
- I-2 (5 credits): *Substitute with Doctoral Research (IDS7919, 4 cr) + Lab Rotations (1 cr)*

USMLE STEP 1 EXAM

(Years 3-5/6: PhD Program)

Year 6/7: MD Clerkship Rotations (M3)

USMLE STEP 2 EXAM

Year 7/8: *Standard year 4 of medical school*

PHD REQUIREMENTS (*adapted from current Biomedical Sciences PhD Program Catalog*)

Required Courses—23 Credit Hours

(I) Substituted (med for grad) courses/credits:

- BSC 6432 Structure-Function-Relationships of Biomedical Sciences I (5 credit hours)
- *Substitute with HB-1 (5 credit hours)*

(DRAFT PROPOSAL)

- IDS 7692L Experiments in Biomedical Sciences (lab rotation) (3 credit hours)
- IDS 7692L Experiments in Biomedical Sciences (lab rotation) (1 credit hour)
- *Substitute with I-1 (FIRE module) (4 credits)*

(II) Non-substituted required (grad) courses

- IDS 7690 Frontiers in Biomedical Sciences (four semesters, 1 credit hour each semester)
- BSC 6433 Structure-Function-Relationships of Biomedical Sciences II (5 credit hours)
- BSC 6431 Practice of Biomedical Science (3 credit hours)
- IDS 6694 Experimental Design and Analysis in Biomedical Sciences (2 credit hours)

Elective Courses—12 Credit Hours (restricted) + 22 Credit Hours (unrestricted)

At least 12 hours of electives must be taken from the following list. Any electives not on this list must be approved by the Graduate Committee before being counted toward degree credit requirements. Directed research, doctoral research and dissertation research may be used to satisfy requirements beyond the first 12 hours, with approval from the program director.

Fulfill elective requirements with the following medical courses:

- *BMS6006, "Health and Disease" (HB-3), 5 cr*
- *BMS6050, "Psychosocial Issues in Healthcare" (C-1), 4 cr*
- *BMS6631, "Hematology and Oncology" (S1), 3 cr*

Dissertation—15 Credit Hours Minimum

- IDS 7980 Dissertation Research (15 credit hours)

Cumulative/Qualifying Examinations

Cumulative examinations will determine if students should continue with their doctoral studies. Eight exams will be given by program faculty members during the second year. Each exam will consist of two questions set by two different faculty members. One will deal with data interpretation from the current literature and the other will require design of experiments to test a hypothesis. A student must satisfactorily answer 10 cumulative examination questions out of 16, to continue in the PhD program.

Candidacy Examination

Candidacy will consist of writing and orally defending a proposal on a research idea *based on and/or related to* the topical area of the dissertation work to the committee and program faculty. This format of the written and oral exam will be an 8-10 page written proposal in NIH-style grant format. After passing the candidacy examination and meeting other requirements as specified, the student can register for dissertation hours.

(DRAFT PROPOSAL)

Admission to Candidacy

The following are required to be admitted to candidacy and enroll in dissertation hours:

- Completed a minimum of 48 credit hours
- Completion of all course work, except for dissertation hours.
- Successful completion of all examinations (cumulative/qualifying and candidacy).
- Successful defense of the written dissertation proposal.
- The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars.
- Submittal of an approved program of study.

Dissertation Defense

The dissertation must consist of **at least** two manuscripts already published or accepted in a mainstream journal within the field. For no more than one manuscript not yet published, it must have been peer-reviewed by a mainstream journal, and the dissertation committee will subsequently determine whether the reviewed manuscript meets the standards for publication prior to the student scheduling his/her defense. For more information, see the General Guidelines for Alternative Organization in the [Thesis and Dissertation Manual](#) of the College of Graduate Studies Thesis and Dissertation office.

Upon completion and approval of the doctoral dissertation by all designated faculty and university offices, the student will make a formal presentation of the research findings in seminar format to the dissertation committee and other university faculty and students. The candidate will answer questions and defend conclusions about the subject matter.

(DRAFT PROPOSAL)

Standardized MD/PhD Curriculum

Year 1

Standard M1 curriculum except that instead of doing the FIRE Module (5 cr)*, students would instead do laboratory rotations and take the graduate seminar course:

IDS 7692L Laboratory Rotations (3 cr)

IDS 7690 Graduate Seminar (2 cr – note: 1 cr Fall + 1 cr Spring – meets Thu 4:30-6 pm)

Year 2

Standard M2 curriculum except that instead of doing the FIRE Module (5 cr)*, students would instead do doctoral research (4 cr) and take the graduate seminar course (1 cr):

IDS 7919 Doctoral Research (4 cr)

IDS 7692L Laboratory Rotations (1 cr)

****NOTE: Students who have already successfully completed the FIRE Module could substitute FIRE credits for the above indicated graduate credits.***

*****USMLE STEP 1 EXAM*****

Year 3 (Graduate School)

Summer –

- IDS 7919 Doctoral Research (6 credits)

Fall –

- BSC 6431 Practice of Biomedical Science (3 cr)
- IDS 7690 (1 cr) Graduate Seminar (year 2)
- IDS 7919 Doctoral Research (4 credits)
- GTA assignment
- Form thesis committee and present preliminary thesis proposal for committee review

Spring –

- BSC 6433 Biomedical Sciences Core II (5 cr)
- IDS 6694 Experimental Design and Analysis in Biomed Sci (2 cr)
- IDS 7690 Graduate Seminar (year 2) (1 cr)
- Doctoral Research (1 cr)
- GTA Assignment

(DRAFT PROPOSAL)

Year 4 (Graduate School)

Summer –

- Doctoral Research (6 credits)
- Cumulative Exams
- Candidacy Exam

Fall –

- Dissertation Research (3 credits)

Spring –

- Dissertation Research (3 credits)
- Graduate Seminar Presentation (required for year 3 PhD students)

Year 5 (Graduate School)

Summer –

- Dissertation Research (3 credits)

Fall –

- Dissertation Research (3 credits)

Spring –

- Dissertation Research (3 credits) + Defense = Successful completion of PhD

“Transition Training” to prepare student for reintegration to clinical skills/clerkship rotations...

Year 6 (Medical School)

Standard M3 Curriculum

*****USMLE STEP 2 EXAM*****

Year 7 (Medical School)

Standard M4 Curriculum

GRADUATION!!

(DRAFT PROPOSAL)

Projected number of MD/PhD students = 2 students (on average) per year.

Admissions:

Program will be introduced to med students through the FIRE Module. Med students interested in MD/PhD would apply for admission into the PhD program anytime before or during medical school. Interested students must identify a qualified research mentor who is willing and able to support the student's PhD research efforts in lieu of or as an extension of the student's FIRE project. This includes PI commitment to provide a minimum of two years of GRA support for the student as a pre-condition for admission.

Administration and Oversight:

MD/PhD Committee *

Suggested Committee Structure:

1. MD/PhD Program Coordinator (Chair*)
2. MD/PhD Program Coordinator (Co-Chair*)
3. BMS PhD Program Coordinator (or representative)
4. FIRE Module Director (or representative)
5. ME Faculty (at-large)
6. BMS Faculty (at-large)
7. MD student rep who has passed USMLE Step 1
8. BMS PhD student who has passed candidacy exam

*Committee will appoint/assign a COM faculty advisor for each student. This advisor will be distinct from PhD thesis committee, and will specifically serve to help ensure that the student advisee remains on track. Student and advisor must meet at least once per year, and annual progress must be reported to and approved by the MD/PhD Committee (in addition to separate MD and PHD Program requirements). COM faculty advisors serving in this capacity should be familiar with both programs. The Chair and Co-Chair should be split between BMS and MED (i.e., one from each department).

Financial Support/Cost*

- MD students pay full tuition for 4 years like other MD students (unless they earn scholarship...)
- Years 3 and 4 would be supported by GTA/GRA from the program or scholarships
- Years 5-6 would be supported by GRA from sponsoring PI laboratory (or fellowship/scholarship)

*Note: Some program costs will be offset with fellowship support from training grants such as the AHA Health Sciences Fellowship for UCF Medical Students, and other such opportunities that may be available. Once the program is well-established and operating successfully, we can apply and compete for training grants such as the medical scientist training program (MSTP) sponsored by the NIH.

Proposal Form for Joint Degrees with the MD Program

- 1. Director/Contact Person:** Steven N. Ebert, PhD, Chair, MD/PhD Development Committee

Office Location: BBS 421

Email: steven.ebert@ucf.edu

Phone: (407) 266-7047

- 2. Academic Level of Joint Degree:** PhD in Biomedical Sciences

- 3. Implementation Date:** August 1, 2015

- 4. Projected Enrolment:** Two students per year, on average.

Year 1 expected enrollment = 2 students

Year 5 expected enrollment = 10 students (total students if we admit 2 per year)

Year 10 expected enrollment = 15 students = steady-state level considering that it will likely take most students 7-8 years to complete the joint MD/PhD program (i.e., approximately 20 students would have been enrolled by this point, with ~5 of the 20 having completed the MD/PhD by this point with an expected graduation rate of ~2 students per year.

- 5. Title:** MD/PHD in Biomedical Sciences (Interdisciplinary Program)

- 6. Brief Description:**

This program will provide an opportunity for qualified students to jointly earn an MD and a PhD in Biomedical Sciences.

- 7. Expected Benefits of Joint Program:**

- Provides opportunity for MD students to obtain advanced research training experience
- Provides opportunity for PhD students to obtain medical training
- Creates more physician-scientists inclined towards academic research and teaching careers
- Physician-scientists are in excellent position to facilitate bench-to-bedside translation of applicable research findings
- Promotes interactions between graduate and medical students, ideally for the benefit of both
- Facilitates strategic integration of graduate and medical education
- Elevates the stature of UCF by demonstrating that we can successfully train physician-scientists through an innovative MD/PhD program
- Supports President Hitt's goal of "achieving international prominence in key programs of graduate study and research"

8. Projected costs and Funding Sources:

- MD students pay full tuition for 4 years like other MD students (unless they earn scholarship...)
- Years 3 and 4 would be supported by GTA/GRA mechanisms available to BMS PhD students
- Years 5-6 would be supported by GRA from sponsoring PI laboratory (or fellowship/scholarship).
- Some program costs will be offset with fellowship support from training grants such as the AHA Health Sciences Fellowship for UCF Medical Students, and other such opportunities that may be available. Once the program is well-established and operating successfully, we can apply and compete for training grants such as the medical scientist training program (MSTP) sponsored by the NIH (Note: MSTP likely will take up to 10 years or more to establish record and be competitive for this mechanism).
- There are also a number of UCF fellowships and scholarships (e.g., Trustees Fellowship, Presidential Fellowship, Graduate Dean's Fellowship, and McNair Underrepresented Minorities Fellowship) available for a limited number of students on a competitive basis.
- Philanthropic scholarships represent another potential source of funding for MD/PhD
- Administrative costs are projected to be relatively light if the number of students admitted remains restricted to approximately two students per year. Staff assistance from the FIRE module and the BMS graduate office will be necessary, and there will be a need for a Director to oversee, coordinate, and manage the program.

9. Admissions Requirements

Students must apply and be admitted to the MD program as well as the Biomedical Sciences PhD program. The MD/PhD option will be introduced to existing medical students through the FIRE Module. Medical students interested in MD/PhD can apply for admission into the PhD program before or during medical school at UCF. Interested students must identify a qualified research mentor who is willing and able to support the student's PhD research efforts in lieu of, or as an extension of, the student's FIRE project. This includes PI commitment to provide a minimum of two years of GRA support for the student as a pre-condition for admission. Current PhD students in Biomedical Sciences interested in pursuing a combined MD/PhD degree would have to independently apply and be accepted into the MD program at UCF.

10. Curriculum:

Standardized MD/PhD Curriculum

Year 1

Standard M1 curriculum except that instead of doing the FIRE Module (5 cr) *, students would instead do laboratory rotations and take the graduate seminar course:

IDS 7692L Laboratory Rotations (3 cr)

IDS 7690 Graduate Seminar (2 cr – note: 1 cr Fall + 1 cr Spring – meets Thu 4:30-6 pm)

Year 2

Standard M2 curriculum except that instead of doing the FIRE Module (5 cr)*, students would instead do doctoral research (4 cr) and take the graduate seminar course (1 cr):

IDS 7919 Doctoral Research (4 cr)
IDS 7692L Laboratory Rotations (1 cr)

**NOTE: Students who have already successfully completed the FIRE Module could substitute FIRE credits for the above indicated graduate credits.*

*****USMLE STEP 1 EXAM*****

Year 3 (Graduate School)

Summer –

- IDS 7919 Doctoral Research (6 credits)

Fall –

- BSC 6431 Practice of Biomedical Science (3 cr)
- IDS 7690 (1 cr) Graduate Seminar (year 2)
- IDS 7919 Doctoral Research (4 credits)
- GTA assignment
- Form thesis committee and present preliminary thesis proposal for committee review

Spring –

- BSC 6433 Biomedical Sciences Core II (5 cr)
- IDS 6694 Experimental Design and Analysis in Biomed Sci (2 cr)
- IDS 7690 Graduate Seminar (year 2) (1 cr)
- Doctoral Research (1 cr)
- GTA Assignment

Year 4 (Graduate School)

Summer –

- Doctoral Research (6 credits)
- Cumulative Exams
- Candidacy Exam

Fall –

- Dissertation Research (3 credits)

Spring –

- Dissertation Research (3 credits)
- Graduate Seminar Presentation (required for year 3 PhD students)

Year 5 (Graduate School)

Summer –

- Dissertation Research (3 credits)

Fall –

- Dissertation Research (3 credits)

Spring –

- Dissertation Research (3 credits) + Defense = Successful completion of PhD

“Transition Training” to prepare student for reintegration to clinical skills/clerkship rotations...

Year 6 (Medical School)

Standard M3 Curriculum

******USMLE STEP 2 EXAM******

Year 7 (Medical School)

Standard M4 Curriculum

GRADUATION!!

11. Criteria for Continued Enrollment:

Student must make satisfactory progress towards degree. Milestones are as follows:

- Complete M1 with passing grades and satisfactory academic progress as defined by COM
- Complete M2 satisfactorily and achieve a passing score on the USMLE Step 1 exam
- Student identifies research mentor for PhD studies and begins working on dissertation project
- Research mentor agrees to serve as thesis chair and sponsor PhD research with GRA support
- Student must complete all required and elective graduate coursework (usually by end of year 3)
- Student must satisfactorily complete thesis proposal, cumulative exams, and candidacy exam
- Once dissertation research has been initiated, student must form thesis committee and the committee must meet at least once per year to review the student's progress in the program
- Student is required to publish at least two first-author original scientific papers from his/her dissertation research in a peer-reviewed reputable scientific journal (impact factor > 2)
- Student must satisfactorily complete all PhD requirements and successfully defend his/her dissertation following a public seminar presentation of the dissertation by the student
- Student must satisfactorily complete clinical rotations required for M3 and M4
- Student must pass the USMLE Step 2 exam
- Student satisfactorily completes all requirements for both MD and PhD programs as outlined here

Option A: For students who are admitted directly to the MD/PhD program

<u>Biomedical Sciences PhD Graduate Requirements</u>	<u>MD/PhD Track in Biomedical Sciences Graduate Requirements</u>
BSC6432 (BMS Core I), 5 cr	(HB-1 Module), 5 cr*
BSC6433 (BMS Core II), 5 cr	BSC6433 (BMS Core II), 5 cr
IDS7692L (Lab Rotations), 4 cr	IDS7692L (Lab Rotations), 4 cr
IDS7690 (Grad Seminar), 1 cr (Must complete 4x1cr=4cr)	IDS7690 (Grad Seminar), 1 cr (Must complete 4x1cr=4cr)
BSC6431 (Practice of Biomed Sci), 3 cr	BSC6431 (Practice of Biomed Sci), 3 cr
IDS6694 (Exptl Design & Analysis for Biomed Sci), 2 cr	IDS6694 (Exptl Design & Analysis for Biomed Sci), 2 cr
Restricted Electives, 12 cr (Chosen from a list of 40 graduate courses – please see catalog for full list)	Substituted Electives (12 cr total*): BMS6006, “Health and Disease” (HB-3), 5 cr BMS6050, “Psychosocial Issues in Healthcare” (C-1), 4 cr BMS6631, “Hematology and Oncology” (S1), 3 cr
Unrestricted Electives including IDS7919 (Doctoral Research), 7 cr	Unrestricted Electives including IDS7919 (Doctoral Research), 7 cr
IDS7980 (Dissertation Research) 15 cr (min)	IDS7980 (Dissertation Research) 15 cr (min)
Pass Cumulative Exams (10/16 minimum)	Pass Cumulative Exams (10/16 minimum)
Pass Candidacy Exam	Pass Candidacy Exam
Annual Thesis Committee Meetings (Maintain satisfactory progress towards degree)	Annual Thesis Committee Meetings (Maintain satisfactory progress towards degree)
Written and Oral Dissertation Defense	Written and Oral Dissertation Defense


*Note: Yellow boxes highlight UCF medical courses to be used to substitute for the graduate program requirement indicated. These will be dual-credit substitutions that will fulfill graduate and medical school curricular requirements as indicated.

Option B: For students who have been admitted after successfully completing one or more years of medical school at UCF

<u>Biomedical Sciences PhD Graduate Requirements</u>	<u>MD/PhD Track in Biomedical Sciences Graduate Requirements</u>
BSC6432 (BMS Core I), 5 cr	(HB-1 Module), 5 cr*
BSC6433 (BMS Core II), 5 cr	BSC6433 (BMS Core II), 5 cr
IDS7692L (Lab Rotations), 4 cr	I-1 (FIRE Module), 5 cr
IDS7690 (Grad Seminar), 1 cr (Must complete 4x1cr=4cr)	IDS7690 (Grad Seminar), 1 cr (Must complete 2x1cr=2cr)
BSC6431 (Practice of Biomed Sci), 3 cr	BSC6431 (Practice of Biomed Sci), 3 cr
IDS6694 (Exptl Design & Analysis for Biomed Sci), 2 cr	IDS6694 (Exptl Design & Analysis for Biomed Sci), 2 cr
Restricted Electives, 12 cr (Chosen from a list of 40 graduate courses – please see catalog for full list)	Substituted Electives (12 cr total*): BMS6006, “Health and Disease” (HB-3), 5 cr BMS6050, “Psychosocial Issues in Healthcare” (C-1), 4 cr BMS6631, “Hematology and Oncology” (S1), 3 cr
Unrestricted Electives including IDS7919 (Doctoral Research), 7 cr	Unrestricted Electives including IDS7919 (Doctoral Research), 7 cr
IDS7980 (Dissertation Research) 15 cr (min)	IDS7980 (Dissertation Research) 15 cr (min)
Pass Cumulative Exams (10/16 minimum)	Pass Cumulative Exams (10/16 minimum)
Pass Candidacy Exam	Pass Candidacy Exam
Annual Thesis Committee Meetings (Maintain satisfactory progress towards degree)	Annual Thesis Committee Meetings (Maintain satisfactory progress towards degree)
Pass Written and Oral Dissertation Defense	Pass Written and Oral Dissertation Defense

*Note: Yellow boxes highlight UCF medical courses to be used to substitute for the graduate program requirement indicated. These will be dual-credit substitutions that will fulfill graduate and medical school curricular requirements as indicated.

Biomedical Sciences PhD

 [Hide](#) preferences menu.

- ☒ [Program Description](#)
- ☒ [Curriculum](#)
- ☒ [Application Requirements](#)
- ☒ [Application Deadlines](#)
- ☒ [Financials](#)
- ☒ [Contact Information](#)

Graduate **HANDBOOK**

- [Biomedical Sciences PhD Handbook](#)

Program **DISCIPLINES**

This program belongs to the following disciplines:

- [Biological Sciences](#)
- [Life Sciences](#)

 **FEEDBACK**

College : Graduate Studies	Degree :XPHD
Department : Burnett School of Biomedical Sciences	Option : Dissertation
Program Websites : http://www.biomed.ucf.edu	

PROGRAM DESCRIPTION

The Biomedical Sciences PhD program is an interdisciplinary program that combines biological and physical science. This program is intended to educate students in independent research and team collaboration within the field.

[Read More](#) ▼▲

CURRICULUM

The Biomedical Sciences PhD program requires a minimum of 72 credit hours beyond the bachelor's degree, including a minimum total of 27 hours of formal course work exclusive of independent study that are required.

The program requires 23 credit hours of core courses, 12 credit hours of electives, and a minimum of 15 credit hours of dissertation research. The remaining 22 credit hours may consist of additional electives, doctoral research and/or dissertation research. Students with an earned master's degree may request that up to 30 credit hours of previous course work be waived.

New students will take a two-semester introductory course, participate in laboratory rotations to identify a research area of interest, and take a sequence of required seminars.

Total Credit Hours Required:

72 Credit Hours Minimum beyond the Bachelor's Degree

Programmatic deficiencies expected of applicants from diverse settings will be addressed early in the program by completion of appropriate course work. Students entering with a master's degree may request that up to 30 semester credit hours of previous course work be waived as degree requirements with approval from the dissertation committee. Students may register for doctoral research until they have been admitted to candidacy, after which they must register for dissertation research.

New students will take a two-semester course that provides an introduction to the interdisciplinary area of biomedical sciences. In addition, a laboratory rotation will allow students to have a brief but intensive experience working with faculty in at least three different research laboratories to find a research area of interest for their dissertation. Finally, a sequence of required seminars will familiarize students with field-related literature and introduce them to the conceptual and technical frameworks in which they will work. All students receiving assistantships must enroll full time.

Required Courses—23 Credit Hours

- BSC 6432 Structure-Function-Relationships of Biomedical Sciences I (5 credit hours)
- BSC 6433 Structure-Function-Relationships of Biomedical Sciences II (5 credit hours)
- IDS 7692L Experiments in Biomolecular Sciences (lab) (3 credit hours)
- IDS 7692L Experiments in Biomolecular Sciences (lab) (1 credit hour)
- IDS 7690 Frontiers in Biomolecular Sciences (four semesters, 1 credit hour each semester)
- BSC 6431 Practice of Biomedical Science (3 credit hours)
- IDS 6694 Experimental Design and Analysis in Biomedical Sciences (2 credit hours)

Elective Courses—12 Credit Hours

At least 12 hours of electives must be taken from the following list. Any electives not on this list must be approved by the Graduate Committee before being counted toward degree credit requirements. Directed

research, doctoral research and dissertation research may be used to satisfy requirements beyond the first 12 hours, with approval from the program director.

- BSC 5418 Tissue Engineering (3 credit hours)
- BSC 5436 Biomedical Informatics: Structure Analysis (3 credit hours)
- BSC 6407C Laboratory Methods in Molecular Biology (3 credit hours)
- CAP 5510 Bioinformatics (3 credit hours)
- CHM 5305 Applied Biological Chemistry (3 credit hours)
- CHM 5450 Polymer Chemistry (3 credit hours)
- CHM 5451C Techniques in Polymer Science (3 credit hours)
- CHS 6251 Applied Organic Synthesis (2 credit hours)
- CHS 6535 Forensic Molecular Biology (3 credit hours)
- CHS 6535L Forensic Analysis of Biological Materials (3 credit hours)
- CHS 6536 Forensic Analysis of DNA Data (2 credit hours)
- GEB 5516 Technology Commercialization (3 credit hours)
- IDS 5127 Foundations of Bio-Imaging Science (3 credit hours)
- MCB 5205 Infectious Processes (3 credit hours)
- MCB 5208 Cellular Microbiology: Host-Pathogen Interactions (3 credit hours)
- MCB 5225 Molecular Biology of Disease (3 credit hours)
- MCB 5505 Molecular Virology (3 credit hours)
- MCB 5654 Applied Microbiology (3 credit hours)
- MCB 5722C Methods in Biotechnology (4 credit hours)
- MCB 5932 Current Topics in Molecular Biology (3 credit hours)
- MCB 5397 ST: Cellular Metabolism (3 credit hours)
- MCB 6226 Molecular Diagnostics (3 credit hours)
- MCB 6417C Microbial Metabolism (3 credit hours)
- PCB 5025 Molecular and Cellular Pharmacology (3 credit hours)
- PCB 5235 Molecular Immunology (3 credit hours)
- PCB 5236 Cancer Biology (3 credit hours)
- PCB 5238 Immunobiology (3 credit hours)
- PCB 5265 Stem Cell Biology (3 credit hours)
- PCB 5275 Signal Transduction Mechanics (3 credit hours)
- PCB 5527 Genetic Engineering and Biotechnology (3 credit hours)
- PCB 5596 Biomedical Informatics: Sequence Analysis (3 credit hours)
- PCB 5665C Human Genetics (4 credit hours)
- PCB 5815 ST: Molecular Aspects of Obesity, Diabetes, and Metabolism (3 credit hours)
- PCB 5838 Cellular and Molecular Basis of Brain Functions (3 credit hours)
- PCB 6528 ST: Plant Molecular Biology (3 credit hours)
- PCB 6585C Advanced Genetics (4 credit hours)
- PCB 6595 Regulation of Gene Expression (3 credit hours)
- PCB 6677 Molecular Evolution and Phylogenetics (3 credit hours)
- ZOO 5748C Clinical Neuroanatomy (3 credit hours)

Unrestricted Electives—22 Credit Hours Minimum

Students should take 22 credit hours of electives, directed research, doctoral research or dissertation research, in consultation with their adviser.

Dissertation—15 Credit Hours Minimum

- IDS 7980 Dissertation Research (15 credit hours)

Cumulative/Qualifying Examinations

Cumulative examinations will determine if students should continue with their doctoral studies. Eight exams will be given by program faculty members during the second year. Each exam will consist of two questions set by faculty members. One will deal with data interpretation from literature and the other will require experiment designs to test a hypothesis. Performance will be evaluated by all program faculty members. A student must satisfactorily answer 10 cumulative questions out of 16 to be eligible to continue in the PhD program.

Candidacy Examination

Candidacy will consist of writing and orally defending a proposal outlining a novel research idea (outside the research area of the dissertation) to the advisory committee and program faculty. This 10-page written proposal will be prepared independently, following an NIH format, and must be approved by the advisory committee. After passing the candidacy examination and meeting other requirements as specified, the student can register for dissertation hours.

Admission to Candidacy

The following are required to be admitted to candidacy and enroll in dissertation hours:

- Completed a minimum of 48 credit hours
- Completion of all course work, except for dissertation hours.
- Successful completion of all examinations (cumulative/qualifying and candidacy).
- Successful defense of the written dissertation proposal.
- The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars.
- Submittal of an approved program of study.

Dissertation Defense

The dissertation must consist of at least two manuscripts already published, accepted or ready for publication in a mainstream journal within the field. For manuscripts not yet peer reviewed, the dissertation committee will determine whether the manuscript meets the standards for publication in a mainstream journal. For more

information, see the General Guidelines for Alternative Organization in the [Thesis and Dissertation Manual](#) of the College of Graduate Studies Thesis and Dissertation office.

Upon completion and approval of the doctoral dissertation by all designated faculty and university offices, the student will make a formal presentation of the research findings in seminar format to the dissertation committee and other university faculty and students. The candidate will answer questions and defend conclusions about the subject matter.

INDEPENDENT LEARNING

The dissertation serves as the independent learning experience.

APPLICATION REQUIREMENTS

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

Applicants entering the program with regular status are expected to have completed course work required for a bachelor's degree in chemistry, cell biology, biochemistry, biophysics, genetics, molecular biology or microbiology.

In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- Official, competitive GRE score taken within the last five years.
- Three letters of recommendation.
- Statement of research interest and purpose, including a summary of relevant work or research experience.
- Résumé.
- A personal or telephone interview.
- Effective for Fall 2012, applicants to this program are required to complete the necessary information requested for the ETS PPI (Personal Potential Index) report that is available during the GRE examination. All official PPI reports must be submitted directly to the UCF College of Graduate Studies (use UCF Institution Code: 5233).

Admission is based on an overall assessment of the qualifications submitted and the interview. All admissions to graduate status are competitive and based on availability of faculty for sponsoring research.

Application Deadlines

Biomedical Sciences PhD	Fall Priority	Fall	Spring	Summer
-------------------------	------------------	------	--------	--------

Domestic Applicants	Dec 15	Dec 15	-	-
International Applicants	Dec 15	Dec 15	-	-
International Transfer Applicants	Dec 15	Dec 15	-	-

FINANCIALS

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see [Funding for Graduate School](#), which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The [Financial Information](#) section of the Graduate Catalog is another key resource.

Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

MD/PhD Track in Biomedical Sciences

PROGRAM DESCRIPTION

This is a dual degree track that enables qualified students to earn a combined MD/PhD in Biomedical Sciences.

[Read More ▼▲](#)

CURRICULUM

We offer an integrated MD/PhD curriculum that enables students to begin working on their PhD project during the first two years of medical school. Students will primarily take medical courses during the first two years and successfully pass the USMLE Step 1 exam at the end of year 2. Required and elective graduate courses are completed in years 3-4 while student is continuing research. Clinical clerkships that are typically completed in years 3-4 of medical school will in most cases be deferred until the student has completed the graduate requirements, though some minimum level of ongoing clinical training will continue throughout the entire duration of the joint degree program to ensure that the student remains connected with clinical education and training even while they are primarily focused on the graduate portion of this dual degree program. The specific curriculum choreography for each student can be tailored to fit project needs, though all students will need to fulfill all requirements for both programs to successfully earn the combined MD/PhD degrees. As indicated below, some medical modules can be substituted for certain graduate courses and vice versa to help reduce redundancy and streamline time to completion of this combined degree program. Students will be able to complete the combined MD/PhD degree in as little as 6 years, though most students will likely require 7-8 years to fulfill all of the requirements. An MD/PhD program committee, consisting of faculty from both the medical and graduate programs, will serve as the oversight committee responsible for tracking and evaluating student progress in this program.

The Biomedical Sciences PhD program requires a minimum of 72 credit hours beyond the bachelor's degree, including a minimum total of 27 hours of formal course work exclusive of independent study that are required.

The program requires 23 credit hours of core courses, 12 credit hours of electives, and a minimum of 15 credit hours of dissertation research. The remaining 22 credit hours may consist of additional electives, doctoral research and/or dissertation research. Students with an earned master's degree may request that up to 30 credit hours of previous course work be waived.

New students will take a two-semester introductory course, participate in laboratory rotations to identify a research area of interest, and take a sequence of required seminars.

The MD curriculum can be found at the following weblink:

<http://med.ucf.edu/academics/md-program/integrated-curriculum/>

Total Credit Hours Required:

72 Credit Hours Minimum beyond the Bachelor's Degree for the PhD portion of the degree. In addition, students must successfully complete all required MD program Modules and Clerkships as indicated:

<http://med.ucf.edu/academics/md-program/program-modules/>

Programmatic deficiencies expected of applicants from diverse settings will be addressed early in the program by completion of appropriate course work. Students entering with a master's degree may request that up to 30 semester credit hours of previous course work be waived as degree requirements with approval from the dissertation committee. Students may register for doctoral research until they have been admitted to candidacy, after which they must register for dissertation research.

New students will take a two-semester course that provides an introduction to the interdisciplinary area of biomedical sciences. In addition, a laboratory rotation will allow students to have a brief but intensive experience working with faculty in at least three different research laboratories to find a research area of interest for their dissertation. Finally, a sequence of required seminars will familiarize students with field-related literature and introduce them to the conceptual and technical frameworks in which they will work. All students receiving assistantships must enroll full time.

Required Courses—23 Credit Hours

- BMS 6001 Cellular Function and Medical Genetics (HB-1 – replaces BSC 6432) (5 credit hours)
- BSC 6433 Structure-Function-Relationships of Biomedical Sciences II (5 credit hours)
- IDS 7692L Experiments in Biomolecular Sciences (lab) (3 credit hours)
- IDS 7692L Experiments in Biomolecular Sciences (lab) (1 credit hour)
- IDS 7690 Frontiers in Biomolecular Sciences (four semesters, 1 credit hour each semester)
- BSC 6431 Practice of Biomedical Science (3 credit hours)
- IDS 6694 Experimental Design and Analysis in Biomedical Sciences (2 credit hours)

Elective Courses—12 Credit Hours

At least 12 hours of electives must be taken from the following list. Any electives not on this list must be approved by the Graduate Committee before being counted toward degree credit requirements. Directed research, doctoral research and dissertation research may be used to satisfy requirements beyond the first 12 hours, with approval from the program director. Students successfully completing the first year of medical school at UCF may substitute the following medical modules to fulfill the elective course requirement:

- BMS 6006 Health and Disease (HB-3 Medical Module) (5 credit hours)
- BMS 6050 Psychosocial Issues in Healthcare (C-1 Medical Module) (4 credit hours)
- BMS 6631 Hematology and Oncology (S-1 Medical Module) (3 credit hours)

Additional electives may be taken as needed from the following list of approved graduate courses:

- BSC 5418 Tissue Engineering (3 credit hours)
- BSC 5436 Biomedical Informatics: Structure Analysis (3 credit hours)
- BSC 6407C Laboratory Methods in Molecular Biology (3 credit hours)
- CAP 5510 Bioinformatics (3 credit hours)
- CHM 5305 Applied Biological Chemistry (3 credit hours)
- CHM 5450 Polymer Chemistry (3 credit hours)
- CHM 5451C Techniques in Polymer Science (3 credit hours)
- CHS 6251 Applied Organic Synthesis (2 credit hours)
- CHS 6535 Forensic Molecular Biology (3 credit hours)
- CHS 6535L Forensic Analysis of Biological Materials (3 credit hours)
- CHS 6536 Forensic Analysis of DNA Data (2 credit hours)
- GEB 5516 Technology Commercialization (3 credit hours)
- IDS 5127 Foundations of Bio-Imaging Science (3 credit hours)
- MCB 5205 Infectious Processes (3 credit hours)
- MCB 5208 Cellular Microbiology: Host-Pathogen Interactions (3 credit hours)
- MCB 5225 Molecular Biology of Disease (3 credit hours)
- MCB 5505 Molecular Virology (3 credit hours)
- MCB 5654 Applied Microbiology (3 credit hours)
- MCB 5722C Methods in Biotechnology (4 credit hours)
- MCB 5932 Current Topics in Molecular Biology (3 credit hours)
- MCB 5397 ST: Cellular Metabolism (3 credit hours)
- MCB 6226 Molecular Diagnostics (3 credit hours)
- MCB 6417C Microbial Metabolism (3 credit hours)
- PCB 5025 Molecular and Cellular Pharmacology (3 credit hours)
- PCB 5235 Molecular Immunology (3 credit hours)
- PCB 5236 Cancer Biology (3 credit hours)
- PCB 5238 Immunobiology (3 credit hours)
- PCB 5265 Stem Cell Biology (3 credit hours)
- PCB 5275 Signal Transduction Mechanics (3 credit hours)
- PCB 5527 Genetic Engineering and Biotechnology (3 credit hours)
- PCB 5596 Biomedical Informatics: Sequence Analysis (3 credit hours)
- PCB 5665C Human Genetics (4 credit hours)
- PCB 5815 ST: Molecular Aspects of Obesity, Diabetes, and Metabolism (3 credit hours)
- PCB 5838 Cellular and Molecular Basis of Brain Functions (3 credit hours)
- PCB 6528 ST: Plant Molecular Biology (3 credit hours)
- PCB 6585C Advanced Genetics (4 credit hours)
- PCB 6595 Regulation of Gene Expression (3 credit hours)
- PCB 6677 Molecular Evolution and Phylogenetics (3 credit hours)
- ZOO 5748C Clinical Neuroanatomy (3 credit hours)

Unrestricted Electives—22 Credit Hours Minimum

Students should take 22 credit hours of electives, directed research, doctoral research or dissertation research, in consultation with their adviser.

Dissertation—15 Credit Hours Minimum

- IDS 7980 Dissertation Research (15 credit hours)

Cumulative/Qualifying Examinations

Cumulative examinations will determine if students should continue with their doctoral studies. Eight exams will be given by program faculty members during the second year. Each exam will consist of two questions set by faculty members. One will deal with data interpretation from literature and the other will require experiment designs to test a hypothesis. Performance will be evaluated by all program faculty members. A student must satisfactorily answer 10 cumulative questions out of 16 to be eligible to continue in the PhD program.

Candidacy Examination

Candidacy will consist of writing and orally defending a proposal outlining a novel research idea (outside the research area of the dissertation) to the advisory committee and program faculty. This 10-page written proposal will be prepared independently, following an NIH format, and must be approved by the advisory committee. After passing the candidacy examination and meeting other requirements as specified, the student can register for dissertation hours.

Admission to Candidacy

The following are required to be admitted to candidacy and enroll in dissertation hours:

- Completed a minimum of 48 credit hours in the BMS graduate program
- Completion of all course work, except for dissertation hours.
- Successful completion of all examinations (cumulative/qualifying and candidacy).
- Successful defense of the written dissertation proposal.
- The dissertation advisory committee is formed, consisting of approved graduate faculty and graduate faculty scholars.
- Submittal of an approved program of study.

Dissertation Defense

The dissertation must consist of at least two manuscripts already published, accepted or ready for publication in a mainstream journal within the field. For manuscripts not yet peer reviewed, the dissertation committee will determine whether the manuscript meets the standards for publication in a mainstream journal. For more information, see the General Guidelines for Alternative Organization in the [Thesis and Dissertation Manual](#) of the College of Graduate Studies Thesis and Dissertation office.

Upon completion and approval of the doctoral dissertation by all designated faculty and university offices, the student will make a formal presentation of the research findings in seminar format to the dissertation committee and other university faculty and students. The candidate will answer questions and defend conclusions about the subject matter.

INDEPENDENT LEARNING

The dissertation serves as the independent learning experience.

APPLICATION REQUIREMENTS

Students interested in pursuing a combined MD/PhD degree must apply and be accepted into medical school and the Biomedical Sciences PhD Program. Separate applications are required, but students wishing to pursue this joint degree program should indicate this and state their reasons on both applications.

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the [Admissions](#) section of the Graduate Catalog. Applicants must [apply online](#). All requested materials must be submitted by the established deadline.

Applicants entering the program with regular status are expected to have completed course work required for a bachelor's degree in chemistry, cell biology, biochemistry, biophysics, genetics, molecular biology or microbiology.

In addition to the [general UCF graduate application requirements](#), applicants to this program must provide:

- One official transcript (in a sealed envelope) from each college/university attended.
- Official, competitive GRE score taken within the last five years (MCAT can be substituted for GRE)
- Three letters of recommendation.
- Statement of research interest and purpose, including a summary of relevant work or research experience.
- Résumé.
- A personal or telephone interview.
- Effective for Fall 2012, applicants to this program are required to complete the necessary information requested for the ETS PPI (Personal Potential Index) report that is available during the GRE examination. All official PPI reports must be submitted directly to the UCF College of Graduate Studies (use UCF Institution Code: 5233).
- In addition to the above requirements, students must also meet the requirements for medical school admission: <http://med.ucf.edu/administrative-offices/student-affairs/admissions/>

Admission is based on an overall assessment of the qualifications submitted and the interview. All admissions to the MD/PhD program are competitive and based on availability of faculty for sponsoring research.

Application Deadlines

Biomedical Sciences PhD	Fall Priority	Fall	Spring	Summer
Domestic Applicants	Dec 15	Dec 15	-	-
International Applicants	Dec 15	Dec 15	-	-
International Transfer Applicants	Dec 15	Dec 15	-	-

NOTE: Students who are already enrolled in medical school at UCF may apply to for acceptance into the Biomedical Sciences PhD program at any point. Similarly, students currently enrolled in the Biomedical Sciences PhD Program who are interested in pursuing a combined MD/PhD may apply to the UCF MD Program at any point. In either case, standard application deadlines will apply. Admission into either program is highly competitive and acceptance into one program does not guarantee admission into the other.

FINANCIALS

Medical students are expected to pay the full tuition for the 4-year medical school program, though there are a number of fellowships and scholarships available on a competitive basis to help defray costs. More information about financial assistance for the medical school portion of the MD/PhD program can be found at:

<http://med.ucf.edu/administrative-offices/student-affairs/financial-services/>

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see [Funding for Graduate School](#), which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The [Financial Information](#) section of the Graduate Catalog is another key resource.

Graduate Fellowships

Fellowships are awarded based on academic merit to highly qualified students. They are paid to students through the Office of Student Financial Assistance, based on instructions provided by the College of Graduate Studies. Fellowships are given to support a student's graduate study and do not have a work obligation. For more information, see [Fellowships](#), which includes descriptions of UCF fellowships and what you should do to be considered for a fellowship.

MD/PhD Development Committee:

1. Chair: Steven N. Ebert, PhD, Associate Professor, BMS
2. Co-Chair: Vincent Armenti, MD/PhD, Professor, MED
3. Annette Khaled, PhD, Associate Professor and BMS PHD Program Coordinator
4. Alexander Cole, PhD, Professor and BMS PHD Program Co-Coordinator
5. Diane Jacobs, PhD, Professor and FIRE Module Director, MED
6. Jonathan Kibble, PhD, Professor and Assistant Dean of Medical Education, MED
7. William Self, PhD, Associate Professor and Chair, BMS Graduate Curriculum Committee
8. Sean Holmes, M2 MED student

Missions:

- *Develop MD/PhD Program in Biomedical Sciences at UCF*
- *Outline curricula and programmatic requirements in collaboration with COM and BMS Graduate Curriculum Committees as well as College of Graduate Studies Administration (Spring 2014)*
- *Present proposal to curriculum committees for the MD and PhD Programs (Spring 2014)*
- *Submit proposal to UCF Graduate Studies Committee (Fall 2014)*

Timeline:

- | | |
|--------------|--|
| Spring 2014: | Review, Edit, and Revise Proposal based on feedback from COM curriculum committees |
| Fall 2014: | Submit finalized formal proposal for approval to UCF Grad Curriculum Committee |
| Spring 2015: | Update catalog and website to include MD/PhD option |
| Fall 2015: | Matriculation of first MD/PhD students in program |

Graduate Curriculum committee minutes: July 7th, 2014

Members in attendance: Debopam Chakrabarti, Bill Self, Victor Davidson, Travis Jewett, Chris Parkinson, Steve Ebert, Laurie Von Kalm, Tony Zervos

Agenda Item #1) Cumulative exams

The committee discussed first the request from the PhD faculty (last meeting) to generate topics for the new PhD cumulative exams. The committee reviewed a list generated from the core course, and discussed at length the kind of 'general' topics that should be included on an annual basis – then proceeded to develop relevant subtopics. It should be noted that where appropriate, these concepts include both prokaryotes and eukaryotes. The consensus list is given below:

1. Biochemistry

- Protein structure and function
- Enzymology
- Metabolism
- Bioenergetics

2. DNA Metabolism (or Maintenance of Genome) and Gene Expression

- Nucleic acid structure and function
- DNA replication, Repair, and Recombination
- Transcriptional and post-transcriptional mechanisms and regulation
- Epigenetics

3. Cell Biology

- Cell cycle regulation
- Signal transduction
- Extracellular matrix and cytoskeleton
- Protein trafficking

4. Developmental Biology

- Stem Cell Biology
- Embryology
- Cell Death Mechanisms
- Aging

Dr. Davidson had previously sent an example question on enzymology that will be sent along with this list to the PhD program coordinators and subsequently the PhD exam committee. The committee also discussed other aspects of the new exam structure, and decided to recommend the following:

1.) The topics should include more details to students when submitting the information. For example if for a given Saturday the questions would be centered on non-coding regulatory RNAs, the students would be told that set of four questions would be **Gene expression, subtopic transcriptional and post-transcriptional regulation with an emphasis on non-coding RNAs (which include eukaryotes and prokaryotes)**. This is an example of a topic that would be given to students to prepare for a set of four questions.

2.) Topics and subheadings for each of the four Saturdays should be given at least one month prior to the cum exams.

The committee will inform the PhD program directors of this guidance and also send this information to the PhD exam committee, as indicated in the PhD faculty meeting minutes from Spring meeting.

Agenda item #2) MD/PhD program review

The committee has previously reviewed the proposal for the track in the PhD program that is being sought for an MD/PhD dual degree program. Dr. Ebert described updates from the Task force that is leading the development and the COM curriculum committee approval of the current proposal. Dr. Ebert discussed the major differences between the MD and our current PhD program and described the typical manner for admission and expected progress of MD/PhD students. Students will either be admitted in a joint manner between the MD admission and PhD admission committees, or will identify through the FIRE module in the first or second year. In either case the PhD admission committee will carefully look at each applicant and will only admit 'top' qualifying applicants. Dr. Ebert also discussed the minor differences in elective coursework and the substitution of the first year Med curriculum (HB1) for Fall semester Core course. All other program requirements remain identical between PhD and MD/PhD students with respect to our program.

A discussion ensued about the funding mechanism for MD/PhD students in the three or more years of matriculation in the PhD program. At this time no separate funding is expected and the PI will be supporting the PhD student in the third year of the PhD portion. In addition discussion of qualifications for PhD mentoring also ensued and no real concern was raised given that our PhD faculty status rules will ensure that outside PhDs or MDs will only be able to mentor a PhD student if they are part of the PhD faculty. Overall the committee is in favor of moving forward with the MD/PhD program through the faculty senate level curriculum committees.

Agenda Item #3) Review of IMS program (MS program integrated with first year MD courses)

As suggested by Dr. Chakrabarti, this agenda item is outside of the jurisdiction of this curriculum committee (should be reviewed only by the BSBS COM MS committee). However there was general enthusiasm for a MS program that would facilitate entry into MD programs but be offered at 'market rate' tuition.

Agenda Item #4) Discussion of Seminar course policies

Based on some discussion at previous PhD faculty meetings, there was some concern that some instructors who teach first year or second year PhD seminar courses were not ensuring that all students read the papers prior to class. Dr. Ebert described his recent experience with teaching seminar alongside Dr. Ratna Chakrabarti. He described a series of mechanisms to ensure that students are actively engaged in seminar class including: 1.) Having students critique their peers during each presentation – and this critique is guided initially by the faculty instructor (how to do it well); 2.) Having two students chosen to ask questions for each presentation (rotating); 3.) Following which students were actively engaged in asking questions of the presenter and the level of detail of the questions; 4.) Grading based on participation in the discussions

The committee was in agreement that these kind of guidelines are a good basis for having an active seminar course – and that this part of graduate training is critical in building good scientists. These guidelines will be used as a basis for reminding faculty who teach seminar (each semester) as to best practices for seminar course success.



University of Central Florida

College of Medicine

M.D. Program Curriculum Committee Minutes

Meeting Date: 5/23/2014

Chaired by: Dr. Richard Peppler

Start time: 2:03 PM **Adjourn time:** 3:15 PM

Attendance: Drs. Armenti, Castiglioni, Davey, Ebert, Gorman, Gros, Jacobs, Karch, Kibble, Monroe, Payer, Peppler, Selim, Thompson and Verduin. Staff: Ms. Berry, Ms. Dexter, & Ms. Willis. Students: M4 Zafar
Dial-In: Dr. Hernandez

Agenda Item	Discussion/Conclusion	Recommendations/Actions	Responsible	Follow Up
Announcements	<ul style="list-style-type: none">4/18/2014 Curriculum Committee minutes were approved.Dr. Klapheke will assume role as the M3/M4 Assistant Dean of Medical EducationDr. Gorman will assume position as Co-Director of Endocrine/Reproductive module		Dr. Peppler	
Joint Degrees	<ul style="list-style-type: none">Dr. Peppler discussed the status of joint degree programs<ul style="list-style-type: none">MD/MS available this fall 2014MD/MBA is ongoing, slow progress	Dr. Peppler will continue to work with the College of Business	Dr. Peppler	

Agenda Item	Discussion/Conclusion	Recommendations/Actions	Responsible	Follow Up
MD/PhD Proposal	<ul style="list-style-type: none"> Dr. Steve Ebert presented information to committee regarding the MD/PhD joint degree program. The program is scheduled to begin fall 2015. The MCAT will replace the GRE for entrance into program. Students must pass STEP 1 before progression to third year. Students that have completed a master's program can transfer up to 30 credits. 	MD/PhD proposal was unanimously approved by committee.	Dr. Steve Ebert	Ongoing
Student Class Update	<ul style="list-style-type: none"> 2015: Students were pleased with third year experience overall. Class of 2015 studying and taking STEP 2 		M4 Zafar	
Program Evaluation Subcommittee	<ul style="list-style-type: none"> Drs. Kibble & Selim commended for analyzing PES structure. Structural changes within PES discussed and approved by committee. <ul style="list-style-type: none"> -2 Co-Chairs in the interim (Drs. Kibble & Selim) -2 voting faculty from pre-clerkship & 2 voting faculty from clerkship (4 total) -1 GME faculty -4 student voting members; 2 pre-clerkship and 2 clerkship (8 total including alternates) Assessment will be actively involved with PES. 	PES will focus on program objectives, macro level data rather than course evaluation.	Dr. Kibble	Ongoing
M1/M2 Subcommittee	<ul style="list-style-type: none"> The FIRE Task Force charged to discuss sustainability issues for larger class size. Need to implement Biostatistics into curriculum, seeing more questions on STEP. Task Force to explore options. 	FIRE Task Force Report for next Curriculum meeting for discussion.		Ongoing
M3/M4 Subcommittee	<ul style="list-style-type: none"> Committee members approved the revised elective/selective/acting internship form. The revised form indicates the percentage of work students will be doing. Dr. Pepler met with students rotating at Bay Pines. Students are pleased overall with the experience, with minor housing issues that have been resolved. 			

Agenda Item	Discussion/Conclusion	Recommendations/Actions	Responsible	Follow Up
Strategic Planning	<ul style="list-style-type: none"> • Basma and her team are working on the new Strategic Plan; 2014-2019. • COM Enterprise meeting in June for discussion on mission and goals of the College as we move forward. 		Dr. Peppler	Ongoing

Course Agenda

September 8, 2014

1. Course Additions

College of Engineering and Computer Science Course Additions

CES 5XXX **ECS-CECE** **3(3,0)**
Monitoring for Infrastructure Systems: PR: One of the following; CES 4100C, ENV 4120, ENV 4561, CWR 4203C, CWR 4101C or CCE 4004. Applications of modern instrumentation and data processing technologies to infrastructure monitoring and assessment. Topics in current and state-of-the-art monitoring techniques, SHM for infrastructure systems, and case studies on performance-based evaluation. *Odd Spring.*
Abbrev: (22 of 30 chars) INFRASTRUCTURE MONITOR
Discussion with others: Reviewed by engineering and Physics faculty. Emails available.
Rationale: Courses with similar content are CGN 3700C, EML 3303C, and PHY 3752C. These are undergraduate measurement courses dealing with basic measurement principles with lab sessions. The new graduate course will cover more advanced topics but will not have a laboratory. It will build on students' knowledge in applying measurement techniques to infrastructure monitoring. Dr. Behzadan currently teaches CGN 3700C. He agrees that there is no overlap with his course. Dr. Mansy currently teaches EML 3303C. His course focuses on Mechanical engineering measurements and signal processing (Fourier transform, etc.). He agrees that the focus of the proposed course is different and the overlap between the proposed course and EML 3303C is minimal. Dr. Velissaris currently teaches PHY 3752C. His course focuses on learning scientific instrumentation and LabView programming through laboratory sessions. He agrees that the topics of the proposed course are not overlapped with those of PHY 3725C.

EEL 5XXX **ECS-ECE** **3(3,0)**
Distributed Control and Optimization for Smart Grid: PR: EEL 3657 and EEL 4216 or C.I. Electric power systems, transmission and distribution networks, voltage stability and VAR control, dispatch of distributed generation, optimization, frequency control, electricity markets and incentive controls. *Odd Fall.*
Abbrev: (29 of 30 chars) Dist Control & Opt Smart Grid

EEL 6XXX **ECS-ECE** **3(3,0)**
Compressive Sensing: PR: EEE 5542. This course offers a broad coverage of the emerging topic of compressive sensing. The focus of the course is on describing the ideas and techniques that have been developed in this field with emphasis on theoretical foundations, algorithm developments, and applications. *Fall.*
Abbrev: (19 of 30 chars) Compressive Sensing

Rationale: Compressive sensing is an emerging field that has recently attracted a lot of attention and has found applications in many areas such as signal processing, wireless communications, medical imaging, and computational biology to just name a few. Upon completion of this course, the students will acquire a broad perspective of this important field and its applications that can be used in their research and their professional career. The course also serves the educational plan for the instructor's NSF CAREER.

ESI 5XXX **ECS-IEMS** **3(3,0)**

Introduction to Data Analytics: PR: STA 5219 and ESI 4312 or C.I. Descriptive, prescriptive and predictive analytics applied to Industrial Engineering applications; regression; classification clustering; data visualization; programming; soft skills for analytics. *Fall*.

Abbrev: (23 of 30 chars) Intro to Data Analytics

Discussion with others: The instructor contacted instructors of other departments who teach similar courses but never received any objection about offering this course. See attached documents.

Rationale: Currently there is no analytics course offered at the IEMS department. Data analytics is a fast growing area. Such a course will provide a competitive advantage to MSc/MSIE/PhD IEMS graduates for the data oriented job market.

College of Graduate Studies Course Additions

IDS 6XXX **GRDST-** **3(3,0)**

Interdisciplinary Approach to Data Visualization: PR: STA 2023, STA 5206, DIG 5876, or C.I. A hands-on, interdisciplinary perspective on basic principles and fundamentals of visualizing statistical information. Topics include: effective visualizations, perception, representation, and general principles. *Spring*.

Abbrev: (18 of 30 chars) Data Visualization

Discussion with others: I've spoken with David Nickerson, the chair of the Department of Statistics. He states, "Thank you for contacting the Statistics Department in advance of proposing this new course. You should proceed with submitting this to your curriculum committee noting that the Statistics Department has no significant conflict with it in its present form."

Rationale: Many students in both technical graduate programs, as well as behavioral sciences want and need a better understanding for how to visualize the results of their research -- particularly in the M&S program. There is no general, interdisciplinary graduate class at UCF that presents such material.

Majors taking course: None

College of Nursing Course Additions

NGR 7XXXL **CON-** **3(0,3)**

Executive DNP Residency: PR: NGR 7911C, NGR 7912C. Implementation of the Executive DNP Project *Spring, Summer, Fall*.

Abbrev: (18 of 30 chars) EXE. DNP Residency

Discussion with others: N/A

Rationale: Objectives to be less clinically focused and more focused on the project than on a clinical experience.

2. Special Topics Additions

College of Engineering and Computer Science Special Topics Additions

CES 5937

ECS-CECE

3(3,0)

Monitoring for Infrastructure Systems: PR: One of the following; CES 4100C, ENV 4120, ENV 4561, CWR 4203C, CWR 4203C or CCE 4004. Applications of modern instrumentation and data processing technologies to infrastructure monitoring and assessment. Topics in current and state-of-the-art monitoring techniques, SHM for infrastructure systems, and case studies on performance-based evaluation. *Occasional*.

Abbrev: (22 of 30 chars) INFRASTRUCTURE MONITOR

Discussion with others: Consulted engineering and physics faculty. Emails available.

Rationale: Courses with similar content are CGN 3700C, EML 3303C, and PHY 3752C. These are undergraduate measurement courses dealing with basic measurement principles with lab sessions. The new graduate course will cover more advanced topics but will not have a laboratory. It will build on students' knowledge in applying measurement techniques to infrastructure monitoring. Dr. Behzadan currently teaches CGN 3700C. He agrees that there is no overlap with his course. Dr. Mansy currently teaches EML 3303C. His course focuses on Mechanical engineering measurements and signal processing (Fourier transform, etc.). He agrees that the focus of the proposed course is different and the overlap between the proposed course and EML 3303C is minimal. Dr. Velissaris currently teaches PHY 3752C. His course focuses on learning scientific instrumentation and LabView programming through laboratory sessions. He agrees that the topics of the proposed course are not overlapped with those of PHY 3725C.

College of Graduate Studies Special Topics Additions

IDS 6938

GRDST-

3(3,0)

Interdisciplinary Approach to Data Visualization: PR: STA 2023, STA 5206, DIG 5876, or C.I. A hands-on, interdisciplinary perspective on basic principles and fundamentals of visualizing statistical information. Topics include: effective visualizations, perception, representation, and general principles. *Occasional*.

Abbrev: (18 of 30 chars) Data Visualization

Discussion with others: I've spoken with David Nickerson, the chair of the Department of Statistics. He states, "Thank you for contacting the Statistics Department in advance of proposing this new course. You should proceed with submitting this to your curriculum committee noting that the Statistics Department has no significant conflict with it in its present form."

3. Course Revisions

College of Education and Human Performance Course Revisions

Tabled. SVAD requested that courses 6403, 6421, 6422, and 6424 be tabled for review of possible overlap of courses. New information – SVAD has indicated no conflicts.

MHS 6403	Techniques of Play Therapy and Expressive Arts Group and Family Play Therapy	3(3,0)
PR: Graduate standing in mental health counseling or related field. <u>MHS 6421.</u> This <u>practical</u> course provides <u>an overview of using different mediums of play therapy, including expressive arts, groups of children, and families for a theoretical foundation for using expressive arts in counseling. systemic approach.</u>		
Abbrev (25 of 30): Tech Play Therap & Express Art Grp & Family Play Therapy		
Term Offered: Fall <u>Spring</u>		
<u>Rationale:</u> This course will continue to include expressive art mediums; however, the course will focus specifically on utilizing this medium with specific populations: groups of children and families. Due to limited time, many therapists choose to see children in groups or to see the whole family. To best prepare students in this certificate program, it is important to create a course that prepares the students for their future work with children in play therapy. <u>There are no programs that list MHS 6403.</u>		
MHS 6421	Foundations of Play Therapy and Play Process Foundations of Play Therapy and Expressive Arts	3(3,0)
PR: Graduate standing in mental health counseling or related field. <u>C.I.</u> <u>Theories</u> This course addresses the <u>theories and application of the principles of play and expressive arts in the counseling process with children.</u>		
Abbrev (28 of 30): Foundn Play Therap & Play Proc Fndn Play Thrpy & Exprss Art		
Term Offered: <u>Spring</u> , Summer		
<u>Rationale:</u> Given that the advanced courses will include expressive art modalities, it is important to include the background and principles of applying this type of counseling with children. The major content areas, foundations of play therapy process and principles, will remain the same. <u>There are no programs that list MHS 6421.</u>		
MHS 6422	Theories of Play Therapy and Play Process Advanced Theories and Techniques of Play Therapy	3(3,0)
PR: MHS 6421. This course will provide <u>provides an overview in-depth study of different play therapy theories counseling theories, utilizing didactic and experiential mediums to enhance the application students' development of those in the counseling process. play therapy skills.</u>		
Abbrev (29 of 30): Theor Play Therap & Play Proc Adv Theor & Tech Play Therapy		
Term Offered: Spring <u>Fall</u>		

Rationale: The current MHS 6422 course focuses solely on play therapy theories. These theories are woven into several of the other play courses. Additionally, the certificate program meets the didactic components for a registered play therapy certificate through the Association for Play Therapy; however, the current certificate offered by UCF does not include an application component to demonstrate that graduate students can apply the knowledge in the counseling room. The changes to this course will meet those needs by including an application component to the study of play therapy theories.

There are no programs that list MHS 6422.

MHS 6424	Applications of Play Therapy with Special Populations Filial Therapy	3(3,0)
-----------------	--	---------------

PR: ~~Graduate standing in mental health counseling or related field.~~ MHS 6421.

~~This course provides an overview of applications of~~ teaches students how to include parents in the play therapy with process through learning a specific populations such as groups, parents, families and/or traumatized children. model of filial in a 10-week group experience.

Abbrev (14 of 30): Appl Play Therap w Spec Pops Filial Therapy

Term Offered: ~~Even~~ Spring

Rationale: The current course, Play Therapy with Special Populations, does not meet the need for working with parents. The current courses in the certificate do not include a practical component for working with the parents of play therapy clientele. Additionally, students in the course will receive hands on experience working with parents in groups. This course will also enhance the ability for research in this area of play therapy due to the increased number of students trained in this area.

There are no programs that list MHS 6424.

College of Nursing Course Revisions

NGR 7748 NGR 7748L	Advanced Clinical Practice Selective for Advanced Practice Nursing	3(1-3,0)
--	--	-----------------

PR: NGR 7176; CR: NGR 7065.

Clinical management of clients with complex health maintenance, health promotion and illness management needs. Graded S/U. May be used in the degree program a maximum of 2 times.

Rationale: A clinical course.

There are no programs that list NGR 7748.

College of Optics and Photonics Course Revisions

OSE 6421	Integrated Optics	3(3,0)
-----------------	--------------------------	---------------

PR: Graduate standing or C.I.

~~The propagation Reviews working principle, system functionality and loss characteristics in dielectric optica waveguides, fundamental concepts design and fabrication issues of both semiconductor integrated photonic devices and fiber optic devices, circuits for optical telecommunication and numerical modeling of complex integrated optical components. interconnect applications.~~

Abbrev (20 of 30): ~~Integrated Optics-Integrated Photonics~~

Discussion with others: Approved by Kalpathy Sundaram (EE) and Talat Rahman (Physics)

Rationale: With advancement of the field of "integrated optics", the technology has more evolved into semiconductor-based photonic devices and systems with active components, as opposed to early approaches based on glasses and other inactive low-index materials. To reflect these changes, a more modern "integrated photonics" course name with updated contents (according to the syllabus) is more appropriate.

Majors taking course: Optics elective

There are no programs that list OSE 6421.

4. Course Deletions

College of Business Administration Course Deletions

SPB 6605

BA-BA

1.5(1.5,0)

Sport and Social Issues PR: CBA master's program of study foundation core, and acceptance into the Sport Business Management program. Provides a broad understanding of how social issues impact sport and how sport impacts society. Included will be an historical overview of sport, athletes' rights, race and gender in sport, the Olympics and international sport, youth sport, the commercialization of sport, and the influence of the media on sport. Lab required.

Discussion with others: N/A

Rationale: Has not been offered in 5 years; no longer need this course

There are no programs that list SPB 6605.

College of Graduate Studies Course Deletions

IDS 5145

GRDST-

3(3,2)

Interdisciplinary Course in Simulation PR: Calculus, matrix algebra, probability and statistics, high level programming language. An interdisciplinary course on simulation with hands-on experience in discrete event modeling, continuous modeling and shared virtual world. May be repeated for credit.

Rationale: This course had not been offered for five years or more. It was added effective 5/2000 and had never been offered. We are requesting that it be deleted so that the catalog reflects an accurate listing of our current course offerings.

There are no programs that list IDS 5145.

College of Optics and Photonics Course Deletions

OSE 6225

OPT-OPT

3(3,0)

Radiometry and Detection PR: Graduate standing and OSE 5203 or C.I. Radiometry, Planck radiators, spectrometers, photon-counting statistics, detector noise analysis, detector mechanisms.

Discussion with others: none

Rationale: Instructor-Dr. Boreman is no longer at UCF. Class has not been taught since 2009
There are no programs that list OSE 6225.

OSE 6457

OPT-OPT

3(3,0)

Photonic Signal Processing PR: Graduate standing and EEL 3470 or PHY 4324 or OSE 5041 or OSE 6111 or C.I. Design, building and testing of photonic information processing systems using fiber-optics bulk polarization optics, acousto-optics, liquid crystals, micromirrors, and integrated optics.

Discussion with others: not required or scheduled by other departments

Rationale: Curriculum committee agreed to terminate the class due to no instructor and material not being taught.

There are no programs that list OSE 6457.