Distinction Through Discovery
Undergraduate Curriculum Grant Proposal Guidelines
Deadline for Application Submission: May 19, 2014

Curriculum Grant Program Purpose:

The Distinction Through Discovery (DTD) Undergraduate Curriculum Grant Program provides seed funding to incorporate undergraduate research and inquiry (URI) practice into curricular elements that engage undergraduate students. The DTD Curriculum Committee encourages departments and programs to take a holistic curricular approach to implementing research and inquiry skills into their program. Enhancing student-centered learning experiences through implementation of teaching strategies that promote research and inquiry can accomplish this goal (see Appendix A).

Funding Levels:

Funding of the curriculum grant proposals is based on the scope of the project:
1. Course: A single course within a department/program: Budget up to $2,500
2. Department: Multiple courses within a department/program: Budget up to $5,000
3. College: Multiple courses within one college: Budget up to $10,000
4. University: Multiple courses across multiple colleges: Budget up to $20,000

Note: If internal non-academic or external collaborators are essential to your proposal, the project may be eligible for the next funding level.

Deadlines: Application deadline is 5:00 p.m. on Monday, May 19, 2014.

Definitions:

DTD: Distinction Through Discovery, FAU's Quality Enhancement Plan (QEP), is focused on improving the culture of URI at FAU through both curricular and co-curricular opportunities.

QEP: Quality Enhancement Plan, part of the university's re-accreditation through SACSCOC

SACSCOC: Southern Association of Colleges and Schools Commission On Colleges

SLO: Student learning outcomes describe the expected gains in knowledge, skills, and attitudes

Student learning experiences: Structured, goal directed teaching and learning strategies

URI: Undergraduate Research and Inquiry

URI Intensity: The intensity of student undergraduate research and inquiry experiences in each proposed course. URI intensity is based on the combination of two factors: 1) the quantity of DTD SLOs (see Appendix B) addressed by the course; and 2) the cognitive level of the DTD SLOs, as outlined by Bloom's Taxonomy (see Appendix B). The three URI intensity categories are:
1. *Exposure:*
   a. Selection of DTD SLOs – includes "formulate questions" (DTD SLO 2) and at least one other DTD SLO.
   b. Cognitive level of URI student learning experiences – states planned outcomes at or above the knowledge and comprehension levels from Bloom's Taxonomy.

2. *Skill building:*
   a. Selection of DTD SLOs – includes "formulate questions" (DTD SLO 2) and at least three other DTD SLOs.
   b. Cognitive level of URI student learning experiences – states planned outcomes at or above the application and analysis levels from Bloom's Taxonomy.
3. *Intensive:*
   a. Selection of DTD SLOs – includes all six DTD SLOs.
   b. Cognitive level of URI student learning experiences – states planned outcomes at the synthesis and evaluation levels from Bloom's Taxonomy.

Note: If the required DTD SLOs are not covered at the appropriate cognitive level, the project will be reduced to the applicable intensity.

Budget Considerations: Lead authors may request funding for up to two years.

Allowable Expenses:

- Faculty stipends and course release support for:
  o Planning and instructional design
  o Curricular design/redesign and implementation
  o Summer funding may be included if appropriate and justified
  o Salaries must include the correct fringe rate
- Student assistants
- Grant-specific in-class materials, equipment, and activities
- Grant-specific support for out-of-class learning experiences
- Curricular revision related travel
- Assessment of DTD SLOs, e.g., surveys, instruments

Non-Allowable Expenses:

- Additional faculty to lower course enrollment
- Expendable course materials
- Student travel to present the results of their scholarly work
- Food and meals

Proposals primarily seeking to add assessment methods and tools to courses without revising extant teaching strategies and learning experiences will not be funded.

Proposal Selection:

All curriculum grant proposals will be peer reviewed and scored using the DTD Curriculum Grant Rubric (see Appendix C). The DTD Curriculum Committee will make funding decisions based on the outcomes of the peer review and equitable distribution of available resources.

Selection and Review Criteria:

The proposals will be evaluated by the following criteria:
1. Curricular Focus: The degree that curricular changes and teaching strategies result in high-quality research and inquiry experiences for the program(s) and students.

2. URI Focus: The degree that the learning experiences match DTD SLO achievement targets (see http://www.fau.edu/ouri/curriculum_grants.php).
3. URI Intensity: The degree that the teaching strategies, learning activities, and the student performance measures align with specified quantity and cognitive level of DTD SLOs.
4. Program Fit and Project Feasibility: The degree in which the program accommodates the curricular change, as well as the feasibility of the project's budget, timeline, and sustainability.

Grant Recipient Expectations:

Grant recipients receiving funding through this program will agree to the following:
1. Permanently incorporate research and inquiry components into their curricula as informed by assessment results.
2. Conduct the following assessment activities to be submitted through an annual report for two consecutive years including the initial year of funding.
    - Gather and evaluate records of student performance in each course enhanced with curriculum grant funding
    - Examine DTD SLO results reports provided by Distinction Through Discovery
    - Summarize the goals of the original proposal and progress made in reaching them
    - Describe assessment activities for measuring the DTD SLOs
    - Explain program improvement efforts undertaken to respond to the results
    - Outline expenditures to date
3. Participate in the annual Distinction Through Discovery Assessment Summer Retreat.
Note: No additional funds will be released to an academic unit in the second year until annual reporting requirements are fulfilled.

Future Course (re)-Certification:

The URI intensity of each course must be recertified every two years. This process will be described in the Office of Undergraduate Research and Inquiry (OURI) website at http://www.fau.edu/ouri.

Distinction Through Discovery
Undergraduate Curriculum Grant Application Instructions

Lead authors who wish to apply to the curriculum grants program must first complete the online cover page and then submit their proposals to ouri@fau.edu by 5:00 p.m., Monday, May 19, 2014. Questions about the Curriculum Grant Program can be directed to Dr. Donna Chamely-Wiik, Director of the Quality Enhancement Plan at 561-297-1019 or dchamely@fau.edu.

Format for submission:

Proposals must be single spaced, with a font size no smaller than 11-point; minimum 1-inch margins; tables and figure legends can be in 10-point font size. Complete applications should include the following:

1. Completion of the online cover page

2. Proposal Narrative**:** Maximum four (4) pages. Include the following sections (with section headers).
   - *Introduction and background:* (How will the students be actively engaged in research and inquiry?) Provide a brief overview of this project and the nature of the issue.
   - *Proposal goals:* (What would you like to accomplish?) Be sure to show a clear alignment between the project goals and the program mission(s). Goals should be framed in terms of student-centered experiences and learning.
   - *Proposal plan:* (How do you plan to get there?) It is critical that the plan demonstrates how student experiences and teaching strategies promote URI knowledge and skills. Any integration of co-curricular opportunities into courses should be explained. Describe the degree the URI teaching and learning strategies will improve or link efforts across the program(s).
   - *Critical issues and challenges:* (What roadblocks do you anticipate?)
   - *Intellectual merit:* (How will this change enrich student learning in your program?) If applicable, describe the interdisciplinary nature of your proposal.
   - *References*

3. Curriculum Inventory (also called curriculum map): The inventory outlines the developmental progression of students' URI knowledge and skills as they progress through the current curriculum and assists identifying gaps and overlaps within this progression. For the purposes of this project, it should indicate when and where DTD SLOs are addressed and at which cognitive level they are covered. If the project includes more than one program, each program should have a separate curriculum inventory. Targeted courses for revision should be indicated. The method to represent the inventory is open, as long as all pertinent information is present. Several examples of curriculum inventory are provided at http://www.fau.edu/ouri/curriculum_grant.php. Please consult with your program or college curriculum or assessment representatives as you develop your curriculum inventory.

4. Course Plan Worksheet: The course plan worksheet should be completed for each course proposed through this grant program. The worksheet should include the following:
   - For each research related learning outcome (if applicable), provide the cognitive level and a description of the **current** teaching strategies, learning activities, and student performance measures.
   - For each research related learning outcome, provide the cognitive level and a description of the **proposed** teaching strategies, learning activities, and student performance measures.
   - Indicate the URI intensity category of the current and proposed courses.

Note: The Course Plan Worksheet form and samples of completed forms are provided at http://www.fau.edu/ouri/curriculum_grant.php.

5. Budget and Resources: Maximum two (2) pages. Include the following sections:
    a. *Budget:* Before completing the budget, please carefully review the sections on allowable and non-allowable expenses (see Page 2).
    b. *Budget justification:* Justify the funding request in narrative form. Each line item on the budget must be fully explained and justified. If a curriculum grant is awarded, OURI may follow-up with the lead author to provide further justification of certain budgeted items.
    c. *Institutional resources:* Describe any institutional resources that will be available for this project (if applicable).

6. Timeline: Maximum one (1) page. Describe or illustrate the timeline by which you will implement your activities.

7. Sustainability: Maximum one (1) page. Describe the plan to continue to offer and deliver the enhanced URI curriculum within these courses.

8. Letter(s) of support:
    a. *Course:* Department/program chair/director
    b. *Department:* Department/program chair/director and collaborating faculty
    c. *College:* College dean, department/program chairs/directors, and collaborating faculty
    d. *University:* College deans, department/program chairs/directors, and collaborating faculty
    Note: If the project involves collaboration with internal non-academic or external entities, additional letters of support from each must be provided.

9. Research Compliance Documentation (if applicable): Maximum one (1) page. If any aspect of your proposal requires review for research compliance per university policies (see http://www.fau.edu/research/forms.php?expanddiv=researchint), please describe the status of that review. If applicable, include information about external reviewing agencies. Include documentation for all reviews, e.g., approval letters, in this section.

Timeline of Expectations and Annual Deadlines

	Deadline Date	Expectation
Summer	Monday May 19th	Curriculum grant proposals due to curriculum committee
	Beginning of July	Grant awardees announced
	July and August	Consultation with DTD Assessment Coordinator to finalize DTD SLOs and indicators, and refine assignments and other measures.
Fall	Fall semester	Implementation of proposed curricular revisions and assessment activities
	First week of October	Authors meeting with DTD Assessment Coordinator and Curriculum Committee Co-Chairs
Spring	Spring Semester	Implementation of proposed curricular revisions and assessment activities
	Mid-January	Fall term assessment results (provided by DTD Assessment Coordinator) examined by academic units
	First week of Feb	Meeting with DTD Assessment Coordinator and Curriculum Committee Co-Chairs
	End of May	Spring term assessment results examined by academic units
Summer	June 15th	Annual reports submitted by academic units
	August	Annual DTD Assessment Summer Retreat

Appendix A: Aims of Distinction Through Discovery and Definition of Research

Distinction Through Discovery (DTD), is focused on improving the culture of undergraduate research and inquiry (URI) at FAU through both curricular and co-curricular opportunities.

It aims to do so both by:
1. scaffolding student learning with pedagogies that are based in research and inquiry practices, and by
2. supporting the "products" of learning including traditional research experiences and creative activities.

This goal is supported, in part, through the DTD Undergraduate Curriculum Grant Program, which provides seed money to departments and programs to implement curricular and co-curricular components for both conventional and honors students that are aligned with the DTD SLOs (see Appendix B).

The DTD Steering Committee articulated a working definition of "research" (adapted from the Council of Undergraduate Research, CUR):

> *An inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline or practice.*

FAU faculty and students recognize "inquiry" to be a scholarly process and/or a product which centers on asking questions or solving problems and which encompasses intellectual traits that transcend subject matter divisions. Examples of such processes common to the disciplines may include questioning existing ideas, identifying approaches to unstructured problems, thinking creatively, exploring new ideas, and examining the processes by which knowledge is discovered. This "contribution to the discipline or practice" may result in communicated deliverables such as written works, exhibitions, performances, works of art, presentations, publications, and other forms recognized within each discipline.

Appendix B: Student Learning Outcomes Examples for each Undergraduate Research and Inquiry Level

Student Learning Outcome	Exposure (Knowledge & Comprehension)	Skill Building (Application & Analysis)	Intensive (Synthesis & Evaluation)
Knowledge	• Summarize previous literature / prior work	• Demonstrate information (meta-) literacy • Appraise appropriateness of theoretical framework(s)	• Assess social value • Create new knowledge
Formulate Questions	• Identify questions • Give example(s) of research questions	• Discover new questions • Breakdown question(s) into manageable units	• Compose logical argument • Predict outcomes
Plan of Action	• Define steps of inquiry	• Employ appropriate methodologies	• Synthesize and evaluate plan(s) of inquiry
Critical Thinking	• Recognize gaps • Describe differences, etc.	• Interpret information, results • Examine limits • Analyze feedback	• Justify conclusions • Prepare critical review • Evaluate feedback
Ethical Conduct	• Explain academic integrity	• Point out ethical issues • Outline potential ethical concerns	• Design ethical research • Maintain ethical integrity
Communication	• Communicate clearly • Reproduce proper format	• Apply appropriate mode(s) / venue(s) for communication	• Prepare / direct communication appropriately based on given audience(s)

Definitions of Distinction Through Discovery Student Learning Outcomes

SLO 1: *Knowledge.* Students will demonstrate content knowledge, core principles, and skills.

SLO 2: *Formulate Questions.* Students will formulate research questions or scholarly/creative problems with integration of fundamental principles and knowledge in a manner appropriate to their discipline.

SLO 3: *Plan of Action.* Students will develop and implement a plan of inquiry to address research and inquiry questions or scholarly problems.

SLO 4: *Critical Thinking.* Students will apply critical thinking skills to evaluate information, their own work, and the work of others.

SLO 5: *Ethical Conduct.* Students will identify significant ethical issues in research and inquiry and/or address them in practice.

SLO 6: *Communication.* Students will convey all aspects of their research and inquiry (processes and/or products) in appropriate formats, venues, and delivery modes.

[1] Bloom's Taxonomy Action Verbs. (n.d.). Retrieved from
http://www.clemson.edu/assessment/assessmentpractices/referencematerials/documents/Blooms%20Taxonomy%20Action%20Verbs.pdf

Appendix C: Distinction Through Discovery Undergraduate Curriculum Grant Program
Full Proposal Rubric

Reviewer: _____

Proposal Title: _____

Lead Author: _____

Lead Author's Program/Department and College: _____

Type of Proposal (check one):   ☐ Course   ☐ Program   ☐ College   ☐ University

*****Only completed applications will be considered*****

Application is Complete		
	Yes	**No**
Personnel and Collaborating Units: All authors & collaborating units are identified.		
Letters of Support: Letters from each collaborating unit are included.		
Support for Commitment: All letters state commitment to: • Permanent implementation of plan • Assessment • Reporting obligations		
Research Compliance: All appropriate information & documentation is provided and clear.		
Narratives: All required sections are completed.		
Curriculum Inventory: Inventory is included and reasonably complete.		
Course Plan Worksheet(s): Worksheet(s) are included and complete.		
Targeted DTD SLOs: Target DTD SLOs are clearly identified.		
Application is complete		

Curricular and URI Focus	5 points	3 points	1 point	Score
1. Curricular focus.	Focused on specific courses and/or other credit-bearing elements; may incorporate co-curricular opportunities into curricular elements.	Generally focused on the curriculum, but some information is incomplete, or it is unclear how the URI enhancements will be specifically integrated into the curriculum.	Focused only on co-curricular activities without them being incorporated into curriculum; or, it is not clear how URI enhancements are integrated into the curriculum.	
2. URI Frame. *Student-centered URI learning experiences*	All URI goals are framed in terms of student-centered experiences and learning.	Some URI goals are framed in terms of student experiences and learning. Others may be framed from the faculty perspective, or the perspective may be unclear.	URI goals are framed in terms of faculty activities and teaching.	
3. URI focus.	The URI basis for the proposed teaching and learning activities is clear and specific.	Teaching and learning are generally associated with research and inquiry, but more information is needed.	Lack of clarity on how the teaching and learning utilize research and inquiry, or how they are relevant to the discipline.	
4. Depth or impact of curricular enhancements. *Potential to impact large numbers of students.*	3 or more courses, OR more than 100 students annually.	2 courses OR between 50-100 students annually	1 course OR fewer than 50 students annually.	

Curricular and URI Focus		5 points	3 points	1 point	Score
<td rowspan="4" style="writing-mode:vertical">SELECT AND SCORE ONLY ONE FACTOR (FROM SECTIONS 5-8)</td>	**5. Course projects:** *Breadth of curricular enhancements*	URI enhancements within an upper-division course clearly contribute to the overall program.	URI enhancements within an upper-division course make limited contribution to the overall program.	URI enhancements are limited to isolated elements of the course; the impact on other aspects of the program is unclear or non-existent.	
	6. Program projects: *Breadth of curricular enhancements*	URI enhancements within a range of upper-division courses of the program have the potential to improve or link DTD SLOs across a significant portion of the entire program.	URI enhancements within key upper-division courses of the program have the potential to improve or link DTD SLOs across those key components of the program.	URI enhancements are limited to isolated elements of the program; the impact on other aspects of the program is unclear.	
	7. College projects. *Breadth of curricular enhancements*	URI enhancements within a range of upper-division courses across multiple programs; plan has the potential to improve or link DTD SLOs across a significant portion of the college's upper-division offerings.	URI enhancements within key upper-division courses across multiple programs; plan has the potential to improve or link DTD SLOs across those programs; impact is primarily within those programs, but there is a clear impact at the college level.	The potential to enhance URI is isolated to just a few courses within only specific programs; it is not clear that there will be an impact at the college level.	
	8. University projects: Breadth of curricular enhancements	URI enhancements within a range of upper-division courses across multiple colleges; plan has the potential to improve or link DTD SLOs across a significant portion of the university's upper-division offerings.	URI enhancements within key upper-division courses across multiple colleges; plan has the potential to improve or link DTD SLOs across those colleges; impact is primarily within those colleges, but there is a clear impact at the university level.	The potential to enhance URI is isolated to just a few courses within only specific colleges; it is not clear that there will be an impact at the university level.	
				Curricular and URI Focus Subscore Total (5-25 points)	

Comments:

Student Learning Outcomes (SLOs)	5 points	3 points	1 point	Score
9. DTD SLO Quantity. *Number of DTD SLOs for identified research and inquiry levels*	Number of DTD SLOs for identified research and inquiry levels are appropriate	Number of DTD SLOs for identified research and inquiry levels are insufficient	Number of DTD SLOs for identified research and inquiry levels are inappropriate	
10. URI Cognitive Level. *The alignment of learning experiences and measures with targeted URI level*	The learning experiences and measures of each selected DTD SLO meet the targeted URI cognitive level.	Most of the learning experiences and measures of each selected DTD SLO meet the targeted URI cognitive level.	The learning experiences and measures of each selected DTD SLO do not meet the targeted URI cognitive level.	
11. Developmental coherence.	Provides coherent, clear, and specific continuity among DTD SLOs as students progress through the curriculum	Provides general continuity among DTD SLOs as students progress through the curriculum	Does not provide continuity among DTD SLOs as students progress through the curriculum	
			Student Learning Outcomes Subscore Total (3-15 points)	

Comments:

Sustainability/Program Fit and Feasibility	5 points	3 points	1 point	Score
12. Mission/Program Alignment. *Alignment with program mission.*	Clear alignment with the mission of the program(s) or the author(s)	General description of alignment is provided, but it is not fully specified	Lack of clarity of how proposal aligns with the mission of the program(s) of the author(s)	
13. Curricular Sustainability.	Clear plan to continue to offer and deliver the new or revised course(s)	Insufficient plan to continue to offer and deliver the new or revised course(s)	No clear plan to continue to offer and deliver the new or revised course(s)	
14. Curriculum Funding.	Clear plan to continue funding the new or revised course(s).	Insufficient plan to continue funding the new or revised course(s).	No clear plan to continue funding the new or revised course(s).	
15. Timeline.	Timeline for implementation is realistic.	Timeline for implementation may be challenging.	Timeline for implementation is not realistic.	
			Sustainability/Fit/Feasibility Subscore Total (4-20 points)	

Comments:

Budget (check box if applicable and score all applicable factors)	5 points	3 points	1 point	Score
☐ *Stipends for curricular development efforts (design, implementation, assessment)*	All funds are for faculty/staff efforts directly tied to URI curricular development in courses or programs	Only some funds are for faculty/staff efforts directly tied to URI curricular development in courses or programs	None of the funds for faculty/staff efforts are related to URI curricular development in courses or programs	
☐ *Funds supporting courses (materials, equipment, and activities)*	All funds are for appropriate materials, equipment, and activities directly tied to URI curricular development	Only some funds are for appropriate materials, equipment, and activities directly tied to URI curricular development in courses or programs	None of the funds are for appropriate materials, equipment, and activities directly tied to URI curricular development in courses or programs	
☐ *Additional faculty/staff*	All funds for additional faculty/staff are directly tied to URI curricular development in courses or programs AND are included in letters of support	Only some funds for additional faculty/staff are directly tied to URI curricular development in courses or programs, AND these funds are included in letters of support	None of the funds for additional faculty/staff efforts are directly related to URI curricular development in courses or programs, OR, these funds are NOT included in the letters of support	
☐ *Travel*	All funds for travel are directly tied to URI curricular development in courses or programs	Only some funds for travel are directly tied to URI curricular development in courses or programs	None of the funds for travel are related to URI curricular development in courses or programs	
☐ *Student assistants*	All funds for student assistants are directly tied to URI curricular development in courses or programs	Only some funds for student assistants are directly tied to URI curricular development in courses or programs	None of the funds for student assistants are related to URI curricular development in courses or programs	
			Sum of Budget Scores	
			Number of Boxes Checked	
		Budget Subscore Total (Divide Sum of Budget Scores by Number of Boxes Checked) (1-5 points)		

Criteria	Subscores
Curricular and URI Focus (5-25 possible)	
Student Learning Outcomes (3-15 possible)	
Sustainability/Fit/Feasibility (4-20 possible)	
Budget (1-5 possible)	
TOTAL PROPOSAL SCORE (13-65 Possible)	