FGCUSScholars

Think

Write

Discover

Mary Crone-Romanovski, Language and Literature
Hulya Julie Yazici, Operations Management
Rita Rubin, Engineering Advisor
Charles W. Gunnels IV, Biology
Why do you engage undergraduates in scholarly activities, research, and creative pursuits?

What do your undergraduates gain from these experiences?
FGCUScholars: Think • Write • Discover
Enhancing a culture of inquiry from composition to capstone

• Advance student writing, critical thinking, and information literacy skills within their majors as students become scholars in their disciplines

• Integrate a common understanding of writing, critical thinking, and information literacy across all four years
• Build on a foundation of General Education toward the creation of scholarly products in capstone courses
• Assess student learning across four years of study and in every major
FGCUScholars: Think • Write • Discover

Year 0: Baseline Assessment
FGCUScholars

• Students see this experience at least 6 times

• General Education
  • Composition II
  • College-Level Writing Courses (CLWS)
    • 2 courses

• Three additional sites within Major
  • Gateway course
  • Second course in each major
  • Senior capstone
Digital Media Research Projects in Upper-Level Literature Courses
Digital Media in Literature
The Course

• Experimental Texts in Eighteenth-Century British Literature
  • 4000-level special topics course
  • British Literature, pre-1800

• Summer A
  • a 6-week term with credit hours equivalent to a 15-week semester
  • Class meetings = Tues/Thurs, 11:30-2:55

• Taught in a Computer Classroom
  • 25 students
  • enough computers for each student to work at one individually
Digital Media in Literature
The Assignment

• The William Blake Project: Assignment Guidelines
• Learning Objectives that meet FGCUScholars (QEP): Students will
  • Practice information literacy skills by researching specific elements of a text and by citing the sources used in their research
  • Exercise critical thinking by analyzing a text within its cultural contexts, and by analyzing the best way to share their information through a digital medium
  • Enhance writing skills by articulating their findings in an appropriate style and format for a wiki page

• Sample Products
  • Object 2, “The Argument”
  • Object 3, “A New Heaven is Begun”
Digital Media in Literature

Results

• Student Feedback: Which assignments supported your learning most?
  • “…the assignment related to the plates by Blake was wonderful to me [...] we were given license to learn and discover on our own terms and I loved that. The results from the various groups that presented showed the spectrum of quality creativity that can be achieved when you give students the opportunity to learn and discover for themselves.”
  • “The Blake project really made us have to immerse ourselves in the work to learn about it.”
  • “The Blake Project was really helpful for understanding the plates.”
  • “I would say the canvas Wiki pages were helpful, as digging in to one specific area helped me to better understand the whole.”

• Student Feedback: Which assignments were most troublesome?
  • “The wiki page was hard to make because of technical glitches, but I also think that the assignment had a big pay-off.”
  • “The group project was the most troublesome, but it was most rewarding in understanding the subject.”
Undergraduate Research Applications in Business Classes
UR in Business Classes

Classes

• Purpose
  • Develop necessary skills in students to become scholars.

• Methodology used
  • Problem Based Learning (PBL)
    • a) construct an extensive and flexible knowledge base
    • b) become effective collaborators
    • c) develop effective problem-solving skills
    • d) become intrinsically motivated to learn
    • e) develop SDL (self directed learning) skills.

• Classes
  • Operations Management
    • required core course for all business majors.
  • Business Statistics/ Data Analytics
    • required for most of the business majors.
UR in Business Classes

Learning Outcomes

• Blooms Taxonomy
  • Understand the concept; Apply method and tools related to the concept; Identify real world business problems; Adept knowledge of methods and concepts to solve problems; Experience the problems in real-world settings.

• FGCUScholars Framework (QEP)
  • Critical Thinking
    • inference, interpretation, evaluation, self- regulation, explanation and analysis
  • Writing
    • context, purpose, genre, syntax
  • Information Literacy
    • identification and access of information/evidence, effective use of information

• Assignments
  • Comprehensive multi-stage term projects.
UR in Business Classes
Operations Management Projects

- Select an organization you are familiar with or you will like to know more.
- Find out their operational issues.
- Contact a manager or supervisor to discuss this.
- Define the project problem.
- Select an OM method to solve the problem.
- Collect data, Formulate the problem, Interpret the results.
- Write a report on the findings and validation with the business.
- Present the project to class.
UR in Business Classes
Project Examples

• Inventory issues at Publix stores
  • Based on the historical sales, students forecasts future sales and develop an operation plan.

• Layout Modeling at FGCU Bookstore
  • Based on student usage, scheduled hours, and other constraints, students proposed layout changes that reduces wait time and unnecessary foot traffic.

• Analyze Retail Giant Target’s supply chain network and how they control their inventory system, prepare a detailed report on supply chain interruptions and improvement suggestions.

• Design a scoring system that assesses organization’s triple bottom (People, Planet, Profit) sustainability maturity.
UR in Business Classes
Student Feedback on projects

• “..The final term project was very informative and I really enjoyed my group members. We worked independently as well as worked in a group setting. We met with each other over the course of the semester and got along great. The class was extremely helpful in everyday situations, as I was able to compare this class and the lessons to my work experience...”

• “..The main reason I enjoyed this class was the fact that it related to everyday life a lot. I was able to understand certain processes or facts from the textbook better because I related the lessons to how I would do certain things at work or everyday.”

• “Data analysis was a contributing aspect to my learning.”

• “...The projects let us greater understand how a company is able to stay active and regularly stocked with resources.”
Assisting Faculty in Creating Scholars: Whitaker College of Engineering
Help students “stay the course” and reach their goals?

- On-going Contact

- Connecting curriculum to personal goals; Affective domain and self esteem

- Developmental and Appreciative Advising

- Proactive and Reactive advising

- Big Picture FGCUScholars
Big Picture: Advising

1. Collaborative planning (student and advisor) and “focusing with the end in mind”.

2. Discussions with students include:
   1. What do I want students to know and be able to do when they graduate from FGCU?

3. Cooperative “mapping” the journey with the student from beginning to end focusing on the QEP goals as well as:
   1. Student learning;
   2. Emotional intelligence;
   3. Overall academic performance.

4. Enriching all of these marketable skills will foster student success at FGCU and in their future!
Big Picture: FGCUScholars

1) We focus on the students and the stages of learning that build critical thinking, writing, and information literacy.

2) We use questioning strategies with students to help them “think about their thinking” ....metacognition.
   a) How are your classes going?
   b) What is going well and what needs to improve?
   c) How will you take what is going well and make it better? What are your strategies for improving what isn’t going well?

3) Balance: nurturing with fostering independence to promote success in all areas.
# FGCUScholars: Curriculum

## Bioengineering
- **Composition II**
- **College-Level Writing Courses**

## English
- **Composition II**
- **College-Level Writing Courses**

## Management
- **Composition II**
- **College-Level Writing Courses**

### Bioengineering
- **Major**
  - **Gateway/Introductory Course**
    - EGS 1006L, Introduction to Engineering Professions
  - **2nd Course in the Major**
    - BME 3100L, Introduction to Biomaterials
  - **Capstone**
    - BME 4884 & 4885, Bioengineering Senior Design I & II

### English
- **Major**
  - **Gateway/Introductory Course**
    - ENG 3014, Introduction to Language and Literature Studies
  - **2nd Course in the Major**
    - All 4XXX courses
  - **Capstone**
    - ENG 4930, Senior Seminar

### Management
- **Major**
  - **Gateway/Introductory Course**
    - XXXX
  - **2nd Course in the Major**
    - MAN 3046, Team and Group Processes
  - **Capstone**
    - MAN 4280, Organizational Developmental and Change
What do you want your undergraduates to gain from scholarly activities, research, and creative pursuits?
Questions

- Mary Crone-Romanovski, Language and Literature
  - mromanovski@fgcu.edu
- Hulya Julie Yazici, Operations Management
  - hyazici@fgcu.edu
- Rita Rubin, Engineering Advisor
  - rrubin@fgcu.edu
- Charles (billy) Gunnels, Biology
  - cgunnels@fgcu.edu
FGCUScholars
Courses

• Scholarly-Focused Courses
  • Main focus of these courses assists students becoming scholars in the discipline through the production of scholarly work that utilizes writing, critical thinking, and information literacy.
    • Composition II
    • Capstone

• Scholarly-Enriched Courses
  • Main focus of these courses teaches specific course content, which includes the production of scholarly work that utilizes writing, critical thinking, and information literacy.
    • General Education CLWS (writing-intensive courses)
    • Major Courses
      • Gateway/ Research Methods
      • Second Course in the Major
This course meets the learning objective of the FGCUScholars program.

Students who complete this course will:
- Practice critical thinking skills by analyzing mainstream and marginal texts in their appropriate contexts.
- Demonstrate information literacy by conducting research on topics in literacy and cultural studies.
- Refine writing and communication skills used to report the results of research and analysis through an accepted methodology and manuscript format.

This Scholarly-Focused Course has been designed to help you become a scholar in the discipline through the production of scholarly work that utilizes writing, critical thinking, and information literacy.

This Scholarly-Enriched Course has been designed to teach specific course content, which will include the production of scholarly work that utilizes writing, critical thinking, and information literacy.
<table>
<thead>
<tr>
<th>Written Communication</th>
<th>Capstone 4</th>
<th>Milestone 3</th>
<th>Milestone 2</th>
<th>Benchmark 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Context of and Purpose for Writing</strong></td>
<td>Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.</td>
<td>Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).</td>
<td>Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience’s perceptions and assumptions).</td>
<td>Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).</td>
</tr>
<tr>
<td><strong>Genre and Disciplinary Conventions</strong></td>
<td>Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task(s) including organization, content, presentation, formatting, and stylistic choices.</td>
<td>Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices.</td>
<td>Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation.</td>
<td>Attempts to use a consistent system for basic organization and presentation.</td>
</tr>
<tr>
<td><strong>Control of Syntax and Mechanics</strong></td>
<td>Uses eloquent language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.</td>
<td>Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.</td>
<td>Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.</td>
<td>Uses language that sometimes impedes meaning because of errors in usage.</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>Capstone 4</td>
<td>Milestone 3</td>
<td>Milestone 2</td>
<td>Benchmark 1</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Content Development</strong></td>
<td>Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, critical analysis and synthesis skills that convey the writer's understanding.</td>
<td>Uses appropriate, relevant, and compelling content to explore ideas using critical thinking skills within the context of the discipline.</td>
<td>Uses appropriate and relevant content to develop and explore ideas through most of the work.</td>
<td>Uses appropriate and relevant content to develop simple ideas in some parts of the work.</td>
</tr>
<tr>
<td><strong>Evaluation of Information; Conclusion</strong></td>
<td>Skillfully analyzes and evaluates information / evidence related to thesis; conclusion is insightful, logical and justified based on a skillful evaluation of evidence.</td>
<td>Adequately analyzes and evaluates information / evidence related to thesis; conclusion is logical and justified based on the evaluation of evidence.</td>
<td>Attempts to analyze and evaluate information / evidence related to thesis and use the evidence in order to justify conclusions.</td>
<td>Takes information at face value (little or no attempt to evaluate quality of information / evidence, relationship to thesis, or support of conclusions).</td>
</tr>
<tr>
<td><strong>Information Literacy</strong></td>
<td><strong>Identification and Access of Information / Evidence</strong></td>
<td>Demonstrates skillful identification and access of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing.</td>
<td>Demonstrates consistent identification and access of credible, relevant sources to support ideas, that are situated within the discipline and genre of the writing.</td>
<td>Demonstrates an attempt to identify and access credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.</td>
</tr>
<tr>
<td><strong>Use Information Effectively to Accomplish a Specific Purpose</strong></td>
<td>Skillfully communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth.</td>
<td>Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.</td>
<td>Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.</td>
<td>Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.</td>
</tr>
</tbody>
</table>
FGCUScholars: Think • Write • Discover

Year 0: Baseline Assessment

- College of Health Professions and Social Work
  1. Health Sciences -- IHS 4938 Senior Seminar – CRN10406
  2. Exercise Science -- APK 4948L Experiential Learning II – CRN 10695

- Lutgert College of Business
  3. Accounting – ACG 4632 Independent Audit I – CRN 10221

- College of Arts and Sciences
  4. Biology – BSC 4911 Senior Project Research – CRN 10745
  5. Math -- MAT 4937 Senior seminar – CRN 10493
  6. English -- ENG 4930 Senior Seminar – CRNs 11796 & 11794
  7. Music-- MUS 4920 Senior Capstone in Music –CRN 11830

- College of Education
  8. Early Childhood Education & Elementary Education -- EDG 4937 Senior Seminar Initial Teacher Preparation. CRNs 11004 & CRN 12100

- Composition II
  9. Science
  10. Health Care
  11. Journalism
  12. Legal Studies and Criminal Justice
FGCUScholars: Think • Write • Discover

Year 0: Baseline Assessment
FGCUScholars: Think • Write • Discover

Year 0: Baseline Assessment

Norming Improved Reliability by 33%
(Oneway Permutation Test: p < 0.001)