

Application for a New Course v10.6

Course ID <i>Subject and Number</i>	ITC 399
Date APPROVED	
Date DENIED	

I. Systems and Catalog Information Complete each item.

1	Course Developer	Ray Pettit
2	Course Teacher	John Homer, Ray Pettit, Brent Reeves, and others
3	Course Title	ITC Research
4	Course Abbreviation (if title is over 30 characters)	
5	College	College of Business Administration
6	Department	School of Information Technology and Computing
7	Number of Credit Hours	1-3
8a.	Number of contact hours - lecture	0
8b.	Number of contact hours – lab/activity	15-135
9	Is the course for a fixed or variable number of credit hours?	variable
10	Explanation for variable credit	Students would be expected to spend about 45 hours per semester doing research related activities per credit hour.
11	Is the course repeatable for additional credit?	yes
12	Maximum total number of credit hours a student can earn for this course	12
13	What type of course is this? (Select one. Please see Schedule Type definitions above.)	☐ Traditional lecture ☐ Traditional lab ☐ Traditional lecture/lab ☒ Experiential Learning ☐ Seminar ☐ Studio ☐ Thesis

		<u> </u> Dissertation
14	Instructor Workload	1-3 hours per week
15	Grade Mode (check all appropriate):	<u> </u> Standard <u> X </u> Credit/No Credit (undergrad only)
16	Maximum Enrollment	N/A, course admission is by permission of instructor and no classroom is used
17	Catalog Description (50 words or less)	(1-3 hours) This course is designed to enable the capable student to pursue research under the direction of a faculty member. Requirements include an annotated bibliography of relevant research and analysis of experimental data. Prerequisites: Permission of the instructor. This course may be repeated.
18	List any prerequisites (course/s, test scores, class standing, major, etc.)	Permission of the instructor
19	List any co-requisites	N/A
20	If the course is cross listed, specify the Course ID(s); MUST have signature in Section V from all Department Chairs	N/A
21	Does this course have any special student costs?	<u> X </u> No <u> </u> Yes (If yes, must attach a <u>completed</u> "Request to Add or Change Course Fees" form. Describe in section IV-F.)
22a	How frequently will the course be offered in the Fall ? All, even or odd years?	All
22b	How frequently will the course be offered in the Spring ? All, even or odd years?	All
22c	How frequently will the course be offered in the Summer ? All, even or odd years?	All
23	First semester this course will be offered <i>New courses may not be taught under their approved course ID until they appear in the catalog, therefore, no earlier than the coming fall.</i>	Fall 2017
24	List course/s that should be deleted,	N/A

	(Also, include the last semester for course/s being deleted) <i>A course cannot be deleted when it is a requirement in a degree plan in any department.</i>	
25	Is this course required for a degree/s? <i>If "Yes," attach a revised degree plan(s) reflecting the placement of the new course.</i>	☐ No ☒ Yes
26	Should the addition of this course be retroactively applied to the degree plan it supports?	☒ No ☐ Yes Explanation:
27	Has this course been offered as a Special Topics course?	☒ No ☐ Yes <i>If "Yes," specify the Course ID and enrollment for each term it was taught. (Note: New courses are NOT required to be taught as Special Topics courses prior to being approved. However, a course may be taught once as Special Topics before it is proposed. See the Course Descriptions section of the Catalog for details.)</i>
28	List any courses in which the content overlaps the proposed course. (Course ID and Name) <i>Attach a statement from the instructor/dept chair of the existing course justifying the new offering in Section IV-D.</i>	N/A

II. Curriculum

1	Degree Plan Explanation of how this course affects degree requirements.	This course will be required for students pursuing the Computing Theory Concentration of the B.S. in Computer Science degree. This course will be in a selection menu for students pursuing any degree concentration in the following degrees: B.S. Computer Science, B.S. Digital Entertainment Technology, B.S. Information Technology.
2	Justification State the justification for adding this course to the current curriculum. Represent the need.	This course provides students a more structured approach to undergraduate research and allows for the formalizing of our current undergraduate research efforts within the department. This course will also allow for the tracking of undergraduate research across the university.

III. Course Design

1. Audience and Course Goal

1	Describe the intended audience, including prerequisite skills.	This course is only allowed with the permission of an instructor who has screened a student and deemed them of appropriate skill, motivation, and maturity to meaningfully contribute to a research project. Students will have demonstrated this qualification either in the classroom or through personal interviews with faculty members.
2	State the overarching course goal(s) in performance terms.	Students will be given training and experience in carrying out scholarly work and experimental design. Students will be given practice in evaluating data (and in applying statistics when appropriate), and proper record keeping techniques. Students will be provided instruction over the principles of technical writing and oral communication.

2. Competencies and Measurements

	Competency	Measurement
1	Evaluate relevant published research for inclusion into specified project.	Instructor will assess the scope and quality of an annotated bibliography created by the student.
2	Appropriately analyze data generated by the current research project.	Instructor will review the techniques that the students used in analyzing data, including both the appropriateness of chosen measures and the quality of the analysis.

3. Text and Resources

1. Give the full publication information of the textbook/s and other required resources and outside readings.

Outside resources that are required will be dependent on the research project to which the student is assigned.

IV. Supporting Documentation

Supporting documents must accompany proposal prior to preliminary approval by chair and dean.

1	Library — Submit new course application and syllabus to the Dean of the Library. Consult with the director and establish a deadline for completion of the library report. Attach the signed copy of the Library report.
2	Instructional Design — The application and syllabus must be reviewed by the Adams Center. Attach a copy of the Adams Center Review Letter.
3	Content Overlap — Include one document for each course you listed in Section I-I. Attach statement from instructor/dept chair of existing course justifying the new offering.
4	Departmental Resources — List the resources that support the course and are available only through the department, if applicable. Attach the list of the holdings and the location/s.
5	Resources — List resources (other than library or departmental resources) that are needed to support this course (computers, lab equipment, other technology, etc.). Attach a complete list of all items and indicate possible sources or estimated cost of each. List the sources of any needed funds.
6	Expenses — List additional expenses needed to implement this course (full-time or part-time faculty, graduate or lab assistants, student employees, travel, special student costs, room renovation, storage facility, etc.). Attach a complete list of all items, the estimated cost of each and the source of the funds.
7	Justification — Attach all documents referred to in Section II-2
8	Syllabus — Attach the syllabus for the course based upon the anticipated first-semester offering.
9	Provide documentation for all additional attachments here

V. Preliminary Approvals

All supporting documentation has been assembled and attached to this application. I believe this course is ready to be presented to appropriate councils. We have a plan to fund this new course.

Course Number and Name ITC 399 - ITC Research

Primary Department

[Signature]
Department Chair
Dean of the College

11.02.16
Date

[Signature]

11/18/16
Date

Cross-listing Department *Add more lines if multiple departments are cross-listing*

Department Chair
Dean of the College

Date

Date

Cross-listing Department *Add more lines if multiple departments are cross-listing*

Department Chair
Dean of the College

Date

Date

VI. Actions *Place all actions on one page.*

Course ID: ITC 399

Course Title: ITC Research

1. College Academic Council: (for all courses)

Note: Insert additional lines for College Academic Council action for each college involved in cross-listed courses.

Approved ☒ Denied ☐ David Parker 11-2-16
College Dean or Director Date

Approved ☒ Denied ☐ Bruce Cini 11/18/16
College Dean or Director Date

2. Graduate Council: (for graduate level courses)

Approved ☐ Denied ☐ _____
Dean of Graduate School Date

3. Teacher Education Council: (when applicable)

Approved ☐ Denied ☐ _____
TEC Chair Date

4. University General Education Council: (when applicable)

Approved ☐ Denied ☐ _____
Provost's designee Date

5. University Undergraduate Academic Council: (*undergraduate level courses*)

Approved ☐ Denied ☐ _____
Vice Provost Date

6. Academic Provost: (for all courses)

Approved ☐ Denied ☐ _____
Provost Date

7. President of the University: (for all courses)

Approved ☐ Denied ☐ _____
President Date

Attach notes, comments, or conditions from appropriate councils:

ACU COLLEGE OF BUSINESS ADMINISTRATION
SCHOOL OF INFORMATION TECHNOLOGY AND COMPUTING
COURSE SYLLABUS
ITC RESEARCH (ITC 399)
MEETING TIME AND PLACE BY ARRANGEMENT WITH RESEARCH MENTOR



Instructor:	Dr. Raymond Pettit	Office Hours:	MWF 9:00 - 11:00 am
Office:	Mabee Business Building 234	Phone:	325-674-2070
Classroom:	N/A	Email:	raymond.pettit@acu.edu

The mission of Abilene Christian University is to educate students for Christian service and leadership throughout the world.

The mission of the College of Business Administration is to glorify God by creating a distinctively Christian environment in which excellent teaching, combined with scholarship, promotes the intellectual, personal and spiritual growth of business students, and educates them for Christian service and leadership throughout the world.

The mission of the School of Information, Technology, and Computing is to provide students with the highest quality education possible in the ever-changing high-tech arena, and to establish within them a foundation of faith from which they can lead and serve in world-changing ways.

Course Description

This course is designed to enable the capable student to pursue research under the direction of a faculty member. Requirements include an annotated bibliography of relevant research and analysis of experimental data. Prerequisites: Permission of the instructor.

This course may be taken for 1, 2, or 3 credit hours. Students are expected to work a minimum of 45 hours per semester hour selected.

This course is intended to be taken by juniors and seniors, but may be taken by freshmen or sophomores who have demonstrated a high level of academic performance, maturity, and independence.

Prerequisites

Permission of the instructor.

Text and Supplements

The instructor will provide any necessary texts or supplements.

Attendance

The student is expected to meet with the instructor each week to assess progress. The meeting times will be determined by the schedules of the instructor and student.

Course Goal

This course will give students experience and training in carrying out scholarly work and experimental design. Student will be able to evaluate data (and apply statistics when appropriate) and keep proper records. Students will learn how to present research through either technical writing or oral presentation.

By working closely with a faculty mentor, students will get to experience what it is like to perform research as a Christian in a technical field.

Goals for Student Competency

	Competency	Measurement Instrument	Measurement Standard
1	Evaluate relevant published research for inclusion into specified project.	Annotated bibliography created by the student.	Instructor assessment of the scope and quality of the annotated bibliography.
2	Appropriately analyze data generated by the current research project.	Documented data analysis of experimental results.	Instructor will review the techniques that the student used in analyzing data, including both the appropriateness of chosen measures and the quality of the analysis.

Grading

This course is taken as a credit / no credit course. Passing this course will be determined by the following factors:

- 1.) The level of enthusiasm for and commitment to the research project. Students should strive for a high level of commitment to the research appropriate to their experience and background.
- 2.) The degree of independence of thought and effort. This is balanced against the need to seek help from the mentor for problems that cannot be solved by independent study. The student should demonstrate a high level of independence of action and self-motivation appropriate to their experience and background.
- 3.) The degree to which the objectives of the research project are met. Mentors will do their best to have fair and reasonable expectations with the understanding that the application of the scientific method is seldom straightforward and results are not always easily realized. Students should strive to complete the tasks that they are given.
- 4.) The quality of the contribution to the appropriate research artifact (paper, poster, or presentation).

Academic Integrity

Every member of the faculty, staff, and student body is responsible for protecting the integrity of learning, scholarship, and research. The full policy is available for review at the campus life website (<http://www.acu.edu/campusoffices/campuslife>).

Students found guilty of an act of academic dishonesty in this course will be subject to the following actions. A first violation will result in a discussion of the infraction with the student and a penalty of a one letter grade deduction from the student's end of course grade. A second violation will result in an F in the course and a recommendation of immediate suspension from the university.

Students with Disabilities

Abilene Christian University is committed to providing a learning atmosphere that reasonably accommodates qualified persons with disabilities. If you feel you have a disability that may impair your capacity to successfully complete this course, please contact Student Disability Services (674-2750) in the Learning Enhancement Center. Student Disability Services assists students with disabilities in obtaining appropriate academic accommodations.

ABILENE CHRISTIAN UNIVERSITY

LIBRARY

M E M O R A N D U M

DATE: January 9, 2017
TO: Ray Petit
FROM: Mark McCallon, Associate Dean for Library Services
RE: Course Application for ITC 399 – ITC Research

After reviewing the course application, the library is able to support the proposed course. Please contact your librarian liaison, Mark McCallon (mccallonm@acu.edu), if additional library resources are needed to support the course. Thank you for the opportunity to evaluate the syllabus and course proposal.

September 28, 2016

Dr. Raymond Pettit
Mabee Business Building 234
Abilene Christian University
Tel: (325)674 2070
Email: Raymond.pettit@acu.edu

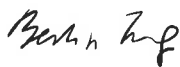
Dear Dr. Pettit,

Thank you for submitting ITC 399: ITC Research for us to review. In order to be compliant with the ACU Syllabus Guidelines, you may need to add the items shown in the checklist attached, specifically:

- Credit hours: You have description about it in the application form, but including similar description in the syllabus itself should help students.
- Intended audience: What grade level(s) is this course intended for?
- ACU and college mission statements.
- Description of how learning and Christian faith are integrated in the course.
- Participation: Is there a way to measure how timely, actively and effectively they participate in meetings with the professor and other aspects of research?
- The guideline also requires "outline of topics", which I understand may vary for research. However would it be possible to describe the general steps to scaffold student participation in research? Is there a process to structure their work during this course, for instance, to initiate/identify a topic, and to conduct regular reviews of progress?
- You have described what you expect from students in terms of the quality of their contribution, but I am unsure how these expectations translate into grading for the course. For each of the qualities for students to demonstrate, what is the highest grade? Is it letter grade, point or percentage? What is the scale? How is each quality weighed? And how is the final grade counted?

I would greatly appreciate it if you could consider these issues and make changes as needed, or explain to the council if there are reasons for keeping the syllabus as it is.

If there is any aspect of the application or course development you would like to discuss further, please let me know. The Adams Center is here to serve you in any aspect of your course development, implementation, and/or ongoing teaching of the course.



Director of Instructional Design, Adams Center

From: **Raymond Pettit** raymond.pettit@acu.edu
Subject: Fwd: New Course Application
Date: March 27, 2017 at 6:04 PM
To: John Homer jdh08a@acu.edu



John,

I think that I have addressed most of Berlin's concerns now. There were some suggestions that I did not implement directly, such as an "outline of topics". I did include a requirement for an annotated bibliography and some analysis of data as it seems that they want something concrete and those artifacts would apply to most of our research projects, but could be modified by the instructor as applicable.

Attached are the application and the syllabus in both .docx and .pdf formats.

-Ray

----- Forwarded message -----

From: Berlin Fang <bx113b@acu.edu>
Date: Mon, Mar 20, 2017 at 2:43 PM
Subject: Re: New Course Application
To: Raymond Pettit <Raymond.Pettit@acu.edu>

Hi Ray,

Thanks for sharing this with me again. I went over the syllabus, Dr. Lewis comments and the letter I wrote earlier, I found that you made some changes, but others stay the same. With regard to Dr. Lewis comments,

(1) Specify the course may be taken for 1-3 hours (not 0-3)

The current syllabus still say that the course can be taken for 0, 1, 2, 3 hours.

(2) Specify the course will be taken credit / no credit, rather than standard grading.

The Syllabus I am receiving still indicate a standard letter-based grading.

(3) Specify 15-45 contact hours (not 1-45), based on 1-3 hours credit

The syllabus indicates "a minimum of 45 hours of work is required per semester hour". Did you mean 15 hours per semester hour? What about the 0-hour option?

(4) Modify the course competencies to use verbs from significant learning taxonomies. Be clear what competency is being measured, and how. We were, for example, that "provide meaningful support" is an action, not a competency. In a 300-level course, we should be using words from the higher levels in the taxonomy.

I didn't see significant change here in the syllabus in this section.

In my original letter, I have also indicate the following items need to be added or clarified:

- Description of how learning and Christian faith are integrated in the course.
- Participation: Is there a way to measure how timely, actively and effectively they participate in meetings with the professor and other aspects of research?
- The guideline also requires "outline of topics", which I understand may vary for research. However would it be possible to describe the general steps to scaffold student participation in research? Is there a process to structure their work during this course, for instance, to initiate/identify a topic, and to conduct regular reviews of progress?

But I couldn't find changes to them either. So I am not sure what I am supposed to do now with the application.

You may review the comments from Dr. Lewis, make changes as needed, or write a memo of response on the rationale for keeping things as they are.

Feel free to call me if I can make any further clarification.

Thanks,

Bailin ("Berlin") Fang, M.S., M.A.
Director, Instructional Design
Walter H. Adams Center for Teaching Excellence
Abilene Christian University
ACU Box 29201