Digital Effects
N357
Fall 2019

Media Arts and Science / Department of Human-Centered Computing
Indiana University School of Informatics and Computing, Indianapolis

Section: 24759
Credit: 3
Time: Mon 6:00-8:40 PM
Location: IT 270 Informatics & Communications Technology Complex
535 West Michigan Street, Indianapolis, IN 46202
First Class: August 26, 2017
Website: https://iu.instructure.com/courses/1838591
Instructor: C. Thomas Lewis, MFA (Film)
Office: IT 473
535 West Michigan Street, Indianapolis, IN 46202
Hours: Tuesday, 2-4, or by Appointment
Phone: (317) 278-3799 (Office)
Email: lewisct@iupui.edu
Prereqs: N253

EXTENDED COURSE DESCRIPTION

This course will instruct students in the basics of motion graphics, compositing and digital video effects. The course will make use of Adobe After Effects to give students a foundation in the tools of professional motion graphics and digital effects.

Required Text Book
The required book is available at the IUPUI bookstore in the Campus Center, or it can be purchased online. The book is available in print or digital format.

Title: Adobe After Effects CC19 Classroom in a Book
ISBN 9780135298640

Teaching and Learning Methods
Lectures and demonstrations of techniques for motion graphics and digital effects
In-class challenges
Presentations of Student Tutorials
Textbook tutorials/quizzes
Individual and group assignments
Critiques of student work at various milestones
## Learning Outcomes

### Program Level Outcomes (PLOs selected from the list of 10 outcomes)

1. Understand digital media and its effective use as a form of communication
2. Communicate ideas effectively in written and oral form to a range of audiences
3. Analyze a problem, identify and evaluate alternatives and plan an appropriate solution
4. Demonstrate mastery of the concepts, techniques and tools in one or more digital media specialties
5. Apply knowledge and skills to develop professional quality digital media productions in a timely manner and utilizing best practices and standards

Visit [http://soic.iupui.edu/undergraduate/degrees/media-arts/learning-outcomes/](http://soic.iupui.edu/undergraduate/degrees/media-arts/learning-outcomes/) to learn more about the Program-Level Learning Outcomes and [https://academicaffairs.iupui.edu/Strategic-Initiatives/IUPUI-Plus](https://academicaffairs.iupui.edu/Strategic-Initiatives/IUPUI-Plus) to learn more about IUPUI Profiles of Learning for Undergraduate Success.

## Alignment of CLOs with Revised Bloom’s Taxonomy of Cognitive Domains, PLOs and Profiles of Learning for Undergraduate Success (IUPUI+)

<table>
<thead>
<tr>
<th>Specific Course Learning Outcomes</th>
<th>RBT*</th>
<th>PLO†</th>
<th>IUPUI+‡</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand basic functions of After Effects program</td>
<td>1,2</td>
<td>1</td>
<td>P1.2 Communicator – Listen Actively</td>
<td>Quizzes on the lesson in the text book.</td>
</tr>
<tr>
<td>2. Apply the tools and technology used to create effective motion graphics and digital effects.</td>
<td>3</td>
<td>2,5</td>
<td>P3.2 Innovator – Creates/Designs</td>
<td>The production values evident in students’ assignments.</td>
</tr>
<tr>
<td>3. Analyze and deconstruct/reconstruct completed motion graphics in order to reproduce them.</td>
<td>4</td>
<td>3</td>
<td>P2.3 Problem Solver – Analyzes, Synthesizes, and Evaluates</td>
<td>In class challenges #1-7</td>
</tr>
<tr>
<td>4. Understand and employ methods of effective design and communication using motion graphics and digital effects.</td>
<td>6</td>
<td>2,4</td>
<td>P1.4 Communicator – Conveys Ideas Effectively</td>
<td>The organization, logic and intelligibility evident in students’ videos</td>
</tr>
<tr>
<td>5. Orally demonstrate FX techniques</td>
<td>3</td>
<td>4</td>
<td>P1.4 Communicator – Conveys Ideas Effectively</td>
<td>Student presented class tutorials</td>
</tr>
</tbody>
</table>

† Program-Level Learning Outcomes.
‡ Profiles of Learning for Undergraduate Success (IUPUI+)

Other Specific Course Outcomes
Students will gain a working knowledge of the following:

- Adobe After Effects software
- Principles of motion graphics and digital effect design
- The requirements involved in the successful planning and designing of a motion graphics and digital effects projects.
- An understanding of the HD video signal, including fluency in the terminology associated with HD video technology and production.

EXPECTATIONS, GUIDELINES, AND POLICIES

Software used: After Effects CC18

Class Supplies
- External storage: Hard drive or flash drive
- Headphones (Should bring in every class once you are editing.)

Attendance
As with all classes, attendance is taken. Genuine reasons like medical concerns will be taken into consideration with proper doctor certification. Attendance will be taken at the beginning of the class and possibly at the end. Canvas is used for attendance and is graded like an assignment. Canvas calculates tardies at 80%.

1-15 minutes late is a tardy, after 15 min it is considered an absence.
Leaving 15 minutes (or less) early is an early departure, considered the same as tardy.
Leaving more than 15 minutes early is an absence.

Any student arriving late/leaving early consistently without a valid reason will be docked a letter grade off their final grade. If you miss a class, it becomes your responsibility to get any notes from a classmate. Do not ask me.

Missing class reduces your grade through the following grade reduction policy: You are allowed two excused or unexcused absences. A third absence, unless excused, results in a 15% reduction in your final course grade. More than three absences result in an F in the course. Missing class may also reduce your grade by eliminating opportunities for class participation. For all absences, the student is responsible for all covered materials and assignments.

Only the following are acceptable excuses for absences: death in the immediate family (mother, father, spouse, child, or sibling), hospitalization or serious illness; jury
duty; court ordered summons; religious holiday; university/school coordinated athletic or scholastic activities; an unanticipated event that would cause attendance to result in substantial hardship to one’s self or immediate family. Absences must be explained with the submission of appropriate documentation to the satisfaction of the instructor, who will decide whether missed work may be made up. Absences that do not satisfy the above criteria are considered unexcused. To protect your privacy, doctor’s excuses should exclude the nature of the condition and focus instead on how the condition impacts your attendance and academic performance.

Incomplete

The instructor may assign an Incomplete (I) grade only if at least 75% of the required coursework has been completed at passing quality and holding you to previously established time limits would result in unjust hardship to you. All unfinished work must be completed by the date set by the instructor. Left unchanged, an Incomplete automatically becomes an F after one year. http://registrar.iupui.edu/incomp.html

Deliverables

You are responsible for completing each deliverable (e.g., assignment, quiz) by its deadline and submitting it by the specified method. Deadlines are outlined in the syllabus or in supplementary documents accessible through Canvas. Films are due at the due date set in Canvas. In fairness to the instructor and students who completed their work on time, a grade on a deliverable shall be reduced 25%. An additional 10% will be deducted for each 24-hour period after the deadline.

Should you miss a class, you are still responsible for completing any deliverables due that day and for finding out what was covered in class, including any new or modified deliverables.

Assignments are due by the due date set in Canvas. In fairness to the instructor and students who completed their work on time, a grade on a late deliverable shall be reduced 25%. An additional 10% will be deducted for each 24-hour period after the deadline.

I will not accept ANY assignments after 1 week following the original due date.

NOTE: Academic double-dipping, whereby the artifacts developed by students for any class in Media Arts and Science are submitted to fulfill the requirements of any other course, is strictly forbidden.

Exams/quizzes

Come prepared for a weekly quiz on the lessons in the textbook. Quizzes can also include anything mentioned in class and anything pulled from readings.
• There could be quizzes, surprise and otherwise.
• Quizzes will happen at the beginning of class. There will be no extensions for lateness and make-ups are at the discretion of the instructor.
• There will be no grade change unless there is a proof of mathematical miscalculation.

Class Assignments

The first half of the semester will require a full immersion into the 14 lessons of the textbook. Since this is a very technical class, this part of the course will expose students to a wide variety of features offered by the software and provide a technical foundation. Students are required to complete the lessons on their own time outside of class. During class there will be lectures, demonstrations, quizzes, in-class challenges, on-line tutorials and student tutorials. Students will also be required to complete several major assignments. Some of these assignments require video shooting/production. During the progress of most assignments there will be milestones that will need to be met.

Lessons in the textbook will be assigned weekly. Students are expected to complete two lessons per week during the first half of the semester.

During the semester each student will be required to present a 12-15 minute After Effects tutorial on an assigned day.

Assignments include:
  o Key framing
  o Camera Rig Construction (creating a device for easy camera handling)
  o 3D cube (animating cube in 3D space)
  o Kinetic Text (animating text)
  o Two Shot basketball Composite (creating seamless visual effects)
  o Two shot composite of your own creation
  o Final Composite (visual effects scene)

All video projects will be submitted through Canvas as 1920x1080 h264 (or MPEG if on Windows) video files. The file name has to be: last name_project name.

Participation

All students are expected to participate by answering questions, asking questions and actively discussing projects during lecture. Your active participation is crucial for class morale. See further information about class participation under Grading Information.
<table>
<thead>
<tr>
<th>Week</th>
<th>Class Challenge</th>
<th>Assigned:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Challenge 1</td>
<td>#1 Bouncing Ball</td>
</tr>
<tr>
<td></td>
<td>Key Frame Demo</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lessons 1,2</td>
<td>#2 Obstacle Course</td>
</tr>
<tr>
<td></td>
<td>Challenge 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shape Animation Demo</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Lessons 3,4</td>
<td>#3 Camera Rig</td>
</tr>
<tr>
<td></td>
<td>Challenge 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Layer Masks/ Alphas</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Lessons 5,6</td>
<td>#4 Camera Rig</td>
</tr>
<tr>
<td></td>
<td>Challenge 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Camera Demo</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Lessons 7,8</td>
<td>#6 3D Cube</td>
</tr>
<tr>
<td></td>
<td>Challenge 5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Lessons 9,10</td>
<td>#3 Kinetic Text</td>
</tr>
<tr>
<td></td>
<td>Challenge 6</td>
<td>#6 3D Cube</td>
</tr>
<tr>
<td></td>
<td>Cube Demo</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Lessons 11,12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Challenge 6</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Lessons 13,14</td>
<td>#5 Kinetic Text</td>
</tr>
<tr>
<td></td>
<td>Challenge 7</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Demo Basic Motion Tracking, Parenting mask,</td>
<td>#7 Basketball Composite</td>
</tr>
<tr>
<td>10</td>
<td>Demo Basic Motion Tracking, Part 2, Green Screen</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Hot Finger Compositing Challenge</td>
<td>#8 Two-Shot Composite</td>
</tr>
<tr>
<td></td>
<td>Assigned:</td>
<td>#7 Basketball Composite</td>
</tr>
<tr>
<td>12</td>
<td>Two-shot Composite</td>
<td>#9 Motion Tracking/Compositing Video</td>
</tr>
<tr>
<td>Week 13</td>
<td>Two-shot Composite</td>
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<tr>
<td>--------</td>
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<td></td>
</tr>
<tr>
<td>Week 14</td>
<td>Motion Tracking/Compositing</td>
<td>Due: #8 Two-Shot Composite</td>
</tr>
<tr>
<td>Week 15</td>
<td>Due: #9 Motion Tracking/Compositing Video</td>
<td></td>
</tr>
</tbody>
</table>

**Grading Information**

- Grades will be based on assignments, quizzes/tests, and attendance/participation.
- Grade Breakdown:
  - Quizzes 20%,
  - Assignments 70%,
  - Participation/Attendance 10%

**Grading Scale**

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>97.00 – 100</td>
<td>A+</td>
<td>Professional level work, showing highest level of achievement</td>
</tr>
<tr>
<td>93.00 – 96.99</td>
<td>A</td>
<td>Extraordinarily high achievement, quality of work showing command of the subject</td>
</tr>
<tr>
<td>90.00 – 92.99</td>
<td>A–</td>
<td>Excellent and thorough knowledge of the subject matter</td>
</tr>
<tr>
<td>87.00 – 89.99</td>
<td>B+</td>
<td>Above average understanding of material and quality of work</td>
</tr>
<tr>
<td>83.00 – 86.99</td>
<td>B</td>
<td>Mastery and fulfillment of all course requirements; good, acceptable work</td>
</tr>
<tr>
<td>80.00 – 82.99</td>
<td>B–</td>
<td>Satisfactory quality of work</td>
</tr>
<tr>
<td>77.00 – 79.99</td>
<td>C+</td>
<td>Modestly acceptable performance and quality of work</td>
</tr>
<tr>
<td>73.00 – 76.99</td>
<td>C</td>
<td>Minimally acceptable performance and quality of work</td>
</tr>
<tr>
<td>70.00 – 72.99</td>
<td>C–</td>
<td>Unacceptable work (Course must be repeated for credit)</td>
</tr>
<tr>
<td>67.00 – 69.99</td>
<td>D+</td>
<td></td>
</tr>
<tr>
<td>63.00 – 66.99</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>60.00 – 62.99</td>
<td>D–</td>
<td></td>
</tr>
<tr>
<td>0.00 – 60.99</td>
<td>F</td>
<td></td>
</tr>
</tbody>
</table>

No credits toward major, minor, or certificate requirements are granted for a grade below C. No credits toward general education or elective requirements are granted for a grade below C–.
Instructions for Checking out Equipment

- The Equipment Room is IT 259
- Do not wait until the last minute to reserve equipment.
- Equipment reservations must be made at least 24 hours in advance.
- Review the equipment check-out policies at: http://soic.iupui.edu/technology/policies/equipment/

Reservation policies can be seen here:
https://soic.iupui.edu/app/support/reserve/equipment/?casticket=ST-840770-cpHBu4txyPW2nlXsl2rb-casprd02.uits.iu.edu

The portal for equipment reservations:
https://checkout.soic.iupui.edu/sso/patron/#/

Accessing IT270 lab for after school hours
To get access to the IT270 after 9 pm weekdays or 6 pm weekends, you will need to print a request form from: https://soic.iupui.edu/app/technology-management/index.php/facility-access/request-form

Fill in the form, once your Crimson Card is scanned, you will be able to enter the lab after school hours.

CODE OF CONDUCT

All students should aspire to the highest standards of academic integrity. Using another student’s work on an assignment, cheating on a test, not quoting or citing references correctly, or any other form of dishonesty or plagiarism shall result in a grade of zero on the item and possibly an F in the course. Incidences of academic misconduct shall be referred to the Department Chair and repeated violations shall result in dismissal from the program.

All students are responsible for reading, understanding, and applying the Code of Student Rights, Responsibilities and Conduct and in particular the section on academic misconduct. Refer to The Code > Responsibilities > Academic Misconduct at http://www.indiana.edu/~code/. All students must also successfully complete the Indiana University Department of Education “How to Recognize Plagiarism” Tutorial and Test. https://www.indiana.edu/~istd You must document the difference between your writing and that of others. Use quotation marks in addition to a citation, page number, and reference whenever writing someone else’s words (e.g., following the Publication Manual of the American Psychological Association). To detect plagiarism instructors apply a range of methods, including Turnitin.com. http://www.ulib.iupui.edu/libinfo/turnitin

Academic Misconduct:
1. Cheating: Cheating is considered to be an attempt to use or provide
unauthorized assistance, materials, information, or study aids in any form and in any academic exercise or environment.

a. A student must not use external assistance on any “in-class” or “take-home” examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, calculators, computers, and wireless communication devices.

b. A student must not use another person as a substitute in the taking of an examination or quiz, nor allow other persons to conduct research or to prepare work, without advanced authorization from the instructor to whom the work is being submitted.

c. A student must not use materials from a commercial term paper company, files of papers prepared by other persons, or submit documents found on the Internet.

d. A student must not collaborate with other persons on a particular project and submit a copy of a written report that is represented explicitly or implicitly as the student’s individual work.

e. A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on fieldwork.

f. A student must not steal examinations or other course materials, including but not limited to, physical copies and photographic or electronic images.

g. A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor or program to whom the work is being submitted.

h. A student must not, without authorization, alter a grade or score in any way, nor alter answers on a returned exam or assignment for credit.

2. Fabrication: A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citation to the sources of information.

3. Plagiarism: Plagiarism is defined as presenting someone else’s work, including the work of other students, as one’s own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered “common knowledge” may differ from course to course.

a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.

b. A student must give credit to the originality of others and acknowledge indebtedness whenever:
   1. directly quoting another person’s actual words, whether oral or written;
   2. using another person’s ideas, opinions, or theories;
   3. paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
4. borrowing facts, statistics, or illustrative material; or
5. offering materials assembled or collected by others in the form of projects or collections without acknowledgment

4. Interference: A student must not steal, change, destroy, or impede another student’s work, nor should the student unjustly attempt, through a bribe, a promise of favors or threats, to affect any student’s grade or the evaluation of academic performance. Impeding another student’s work includes, but is not limited to, the theft, defacement, or mutilation of resources so as to deprive others of the information they contain.

5. Violation of Course Rules: A student must not violate course rules established by a department, the course syllabus, verbal or written instructions, or the course materials that are rationally related to the content of the course or to the enhancement of the learning process in the course.

6. Facilitating Academic Dishonesty: A student must not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct, nor allow another student to use his or her work or resources to commit an act of misconduct.

OTHER POLICIES

1. Right to revise: The instructor reserves the right to make changes to this syllabus as necessary and, in such an event, will notify students of the changes immediately.

2. IUPUI course policies: A number of campus policies governing IUPUI courses may be found at the following link: http://registrar.iupui.edu/course_policies.html

3. Classroom civility: To maintain an effective and inclusive learning environment, it is important to be an attentive and respectful participant in lectures, discussions, group work, and other classroom exercises. Thus, unnecessary disruptions should be avoided, such as ringing cell phones, engagement in private conversations and other unrelated activities. Cell phones, media players, or any noisy devices should be turned off during a class. Texting, surfing the Internet, and posting to Facebook or Twitter during class are generally not permitted. Laptop use may be permitted if it is used for taking notes or conducting class activities. Students should check with the instructor about permissible devices in class. IUPUI nurtures and promotes “a campus climate that seeks, values, and cultivates diversity in all of its forms and that provides conditions necessary for all campus community members to feel welcomed, supported, included, and valued” (IUPUI Strategic Initiative 9). IUPUI prohibits “discrimination against anyone for reasons of race, color, religion, national origin, sex, sexual orientation, marital status, age, disability, or [veteran] status” (Office of Equal Opportunity). Profanity or derogatory comments about the instructor, fellow students, invited speakers or other classroom visitors, or any members of the campus community shall not be tolerated. A violation of this rule shall result in a
warning and, if the offense continues, possible disciplinary action.

4. Bringing children to class: To ensure an effective learning environment, children are not permitted to attend class with their parents, guardians, or childcare providers.

5. Course Evaluation Policy: Course evaluations provide vital information for improving the quality of courses and programs. Students are required to complete one course and instructor evaluation for each section in which they are enrolled at the School of Informatics and Computing. This requirement has three exceptions: (a) The student has withdrawn from the course; (b) only one student is enrolled in the section (in which case anonymity is impossible); and (c) the section is a laboratory that must be taken with a course having a different section number. Course evaluations are completed at https://soic.iupui.edu/app/course-eval/. Course evaluations are open from the eleventh week. Course evaluations are anonymous, which means that no one can view the name of the student completing the evaluation. In addition, no one can view the evaluation itself until after the instructor has submitted the final grades for the course. In small sections, demographic information should be left blank, if it could be used to identify the student. A course evaluation must close before the grade for that course can be released. To ensure students have had ample opportunity to complete the evaluation, an uncompleted course evaluation could delay the release of the grade for up to a week.

6. Communication: The instructor should respond to emails within 48 hours, excluding weekends and holidays, and announce periods of extended absence in advance. The instructor should provide weekly office hours or accept appointments for face-to-face, telephone, or teleconferenced meetings.

7. Email: Indiana University uses your IU email account as an official means of communication, and students should check it daily for pertinent information. Although you may have your IU email forwarded to an outside email account, please email faculty and staff from your IU email account.

8. Disabilities Policy: In compliance with the Americans with Disabilities Act (ADA), all qualified students enrolled in this course are entitled to reasonable accommodations. Please notify the instructor during the first week of class of accommodations needed for the course. Students requiring accommodations because of a disability must register with Adaptive Educational Services (AES) and complete the appropriate AES-issued before receiving accommodations. The AES office is located at UC 100, Taylor Hall (Email: aes@iupui.edu, Tel. 317 274-3241). Visit http://aes.iupui.edu for more information.

9. Administrative Withdrawal: A basic requirement of this course is that students participate in all class discussions and conscientiously complete all required course activities and/or assignments. If a student is unable to attend, participate in, or complete an assignment on time, it is the student’s responsibility to inform the instructor. If a student misses more than half of the required activities within
the first 25% of the course without contacting the instructor, the student may be administratively withdrawn from this course. Administrative withdrawal may have academic, financial, and financial aid implications. Administrative withdrawal will take place after the full refund period, and a student who has been administratively withdrawn from a course is ineligible for a tuition refund. Contact the instructor with questions concerning administrative withdrawal.

10. Emergency Preparedness: Safety on campus is everyone’s responsibility. Know what to do in an emergency so that you can protect yourself and others. For specific information, visit the emergency management website. [http://protect.iu.edu/emergency](http://protect.iu.edu/emergency)

**MISSION STATEMENT**

The Mission of IUPUI is to provide for its constituents excellence in
- Teaching and Learning;
- Research, Scholarship, and Creative Activity; and
- Civic Engagement.

With each of these core activities characterized by
- Collaboration within and across disciplines and with the community;
- A commitment to ensuring diversity; and
- Pursuit of best practices.

IUPUI’s mission is derived from and aligned with the principal components—Communities of Learning, Responsibilities of Excellence, Accountability and Best Practices—of Indiana University’s Strategic Directions Charter.

**STATEMENT OF VALUES**

IUPUI values the commitment of students to learning; of faculty to the highest standards of teaching, scholarship, and service; and of staff to the highest standards of service. IUPUI recognizes students as partners in learning. IUPUI values the opportunities afforded by its location in Indiana’s capital city and is committed to serving the needs of its community. Thus, IUPUI students, faculty, and staff are involved in the community, both to provide educational programs and patient care and to apply learning to community needs through service. As a leader in fostering collaborative relationships, IUPUI values collegiality, cooperation, creativity, innovation, and entrepreneurship as well as honesty, integrity, and support for open inquiry and dissemination of findings. IUPUI is committed to the personal and professional development of its students, faculty, and staff and to continuous improvement of its programs and services.

**Campus Resources**

[https://helpmeroar.iupui.edu/index.html](https://helpmeroar.iupui.edu/index.html)

The R.O.A.R. — or "Registry of Options and Resources" — website is a one-stop shop of information with campus and local community resources within a five-mile radius of IUPUI.